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HOW TO MAKE GOOD MOVIES

HOW TO MAKE GOOD MOVIES

Eastman Kodak
Company
Rochester, N. Y.

A non-technical handbook for those considering the ownership of an amateur movie camera and for those already actively engaged in the making of home movies who want to improve the interest and quality of their films.

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

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This illustration was made directly from Kodachrome Film. Its full, rich, and amazingly realistic coloring can be duplicated by the user of any standard 8 mm. or 16 mm. movie camera loaded with Ciné-Kodak Kodachrome Film.

He: "'How to Make Good Movies'—here's the book we want to read, all right."

She: "Our movies seem pretty grand to me just the way they are. Why bother about reading a book?"



There is a very good reason, madam, even though your movies are undeniably good. Much of their excellence, you will readily admit, is the result of *your* experience in movie making. This book is based upon the experiences of *thousands* of movie makers who have learned how to derive the utmost enjoyment from their 8 mm. and 16 mm. movie outfits. Many of its illustrations, in fact, are enlargements from the movie films of your fellow cinamateurs.

How to Make Good Movies picks up the story where instruction manuals leave off. When the simple instructions in manuals are observed you will consistently obtain scenes that are clear and crisp. Yet these, alone, do not necessarily represent home movies at their easy best. They may be nothing more than animated still pictures. The distinction—and it is an important one—is illustrated and somewhat clarified on the succeeding two pages.

Let it be made clear, however, that we have no bone to pick with snapshots. Still pictures and movies are actually radically different photographic mediums. Each snapshot should, *in itself*, tell a story. Each movie scene need tell only *part* of the story. But a succession of movie scenes can and should tell *all* of the story in a manner both interesting and entertaining. The very fact that they are shown in succession implies that they *will* tell a complete and connected story.

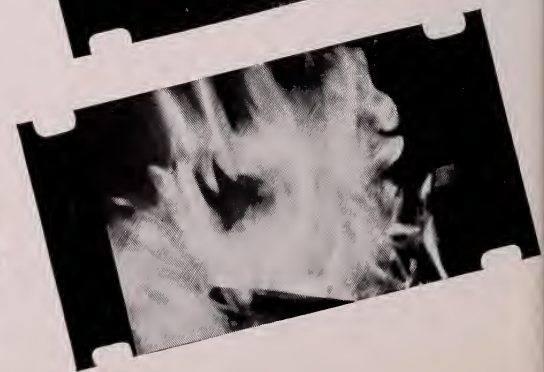
If you already own a movie outfit or are considering the purchase of one, you'll find How to Make Good Movies informative and stimulating reading. Its contents, unless otherwise specified, are equally applicable to 8 mm. cameras or to 16 mm. cameras. Some description of the mechanics of cameras and projectors...some data concerning the properties of film and accessories, will be found within its covers. But all superfluous technicalities have been rigidly tabooed.









JUST WHAT IS A MOVIE?

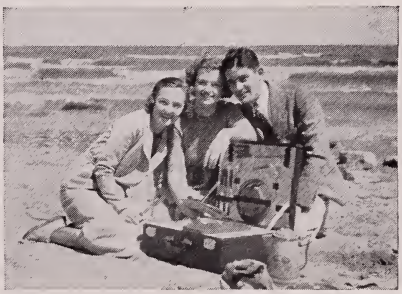
IT would seem, off hand, that a "movie" is any series of scenes filmed with a movie camera. On this page you see extracts, somewhat enlarged, from several movie scenes of a picnic. Exposure and focusing are correct, and all of the members of the picnic have been clearly recorded.

Yet these scenes do not really represent a movie of a picnic.

On the opposite page are enlargements arranged in the order of projection promising the best continuity. These scenes have a logical beginning, and a logical ending. They leave you with a sense of having *actually been on a picnic*, from arrival at the beach to the evening bonfire—not merely of having *looked at a group on a picnic*. Long shots, medium shots, close-ups, shots angled down, shots angled up, group shots, shots of hands alone, shots of a few seconds' duration of high-lighting close-ups, shots of ten seconds or more to introduce the locale and "cast"—the whole makes *one movie* of *one subject*. You'll find it better fun to make, and far more fun to see, than the somewhat stilted picture story below.

You'll readily agree that the picnic pictures on the opposite page, as enlarged from a reel of 16 mm. black-and-white film, are more complete and interesting than the illustrations below. But perhaps you feel that this is true only because more film was devoted to the former. Yet, if each of these ten scenes was given a full ten seconds of exposure, they would only require a total of forty feet of 16 mm. film . . . less than half a roll of 8 mm. film. Certainly a group of your friends on a picnic would justify this footage.









She: "If it's really easy to make better movies, I'm all for reading this book. But if it's going to take a lot of fussing. . . "



GOOD MOVIES don't really require fussing at all. In general, there's an instantaneous transition from movies that are just so-so to those that are really good when a movie maker grasps the fact that his movie camera can and *should* be used somewhat differently than his trusty Kodak.

But let's start from scratch and assume that you've never used a movie camera, know nothing about the relative advantages of various films or the respective uses and importance of accessories. And let's assume, too, that your interest in these matters lies solely in their bearing upon the amount of enjoyment you expect to derive from home movies. If, in your particular case, this latter assumption is incorrect, and you are deeply interested in the more advanced applications of cinematography, a note to the Service Department of the Eastman Kodak Company will bring you all the information you desire on any subject.

But How to Make Good Movies—*easily*—is our theme. And the first item is Focusing.

FOCUSING

HERE, at the outset, we are treading on thin ice, because focusing has to do with lenses. Which, did we go into the matter thoroughly, would occupy us for quite some time. For lenses are not merely bits of polished glass on the front of a camera with which to keep out dirt and let in light. The lenses of Eastman movie cameras—Ciné-Kodaks—are anastigmats composed of several thicknesses of optical glass ground to within





A glance at your subject . . . you turn the lens barrel until the footage (in this instance, 13 feet) matching the subject's distance from the camera appears alongside a marker—and sharp focus is assured.



Yet often you'll not want to change focus for every shot—particularly outdoors. When this is the case you need only set the standard lens at the 25-foot marker to obtain universal focus.

1/30,000th of an inch of perfection and cemented together — the net result of which is, among other things, that such photographic bugaboos as astigmatism, spherical aberration, chromatic aberration, and coma are reduced to a minimum. Or, in the language of How to Make Good Movies, they enable you to make remarkably clear pictures under a wide range of light conditions.

FIXED-FOCUS VS. FOCUSING CAMERAS

Ciné-Kodaks are either fixed-focus or focusing. With the former the lens is *always* in focus on objects more than a few feet distant. For some cameras this "few feet" is specified as "eight feet." And for subjects closer than 8 feet you are cautioned to use a portrait attachment. Manuals for other fixed-focus cameras contain a scale which, for example, advises you that when making movies under poor light accurate focus is doubtful for subjects nearer than 6 feet—but when the light is sufficiently brilliant to permit the use of an extremely small aperture the camera can safely be used as close as 2 feet. So, if your camera is fixed-focus, you should consult your manual and remember its simple advice on focusing.

A focusing camera, however, places little or no restriction on the nearness of subjects. By merely turning the lens barrel, which moves the lens nearer to or farther away from the film, you bring any desired subject from 2 feet to infinity into accurate focus on the film in the same manner in which you focus binoculars. And in good light it can be used as a fixed-focus camera by setting the lens at the 25-foot marker.

He: **"What, then, are the advantages of a focusing camera?"**



First off, most focusing cameras have faster lenses. And faster lenses, used at their wider apertures, must be focused for sharp reproduction. Furthermore, most focusing cameras take interchangeable lenses, which must, of course, be individually focused.

These faster lenses, such as the standard Ciné-Kodak Anastigmat *f*/1.9 lenses used with all focusing Ciné-Kodaks, enable you to make movies under unfavorable outdoor lighting conditions beyond the scope of *f*/3.5 lenses in fixed-focus cameras. Early morning, late afternoon, scenes in heavy shade on days of diminished sunlight—to mention but a few. The *f*/1.9 lens is, of course, faster than the *f*/3.5 lens—but this ability to make good movies with less light would be of no value if you couldn't focus accurately on all subjects under poorer light conditions. And there will be times when you will want to focus sharply on a subject, perhaps 6 feet from your camera, so as to deliberately throw out of focus an unflattering background which, if sharply reproduced, would detract from the attention given your subject in the foreground. Furthermore, there are indoor movies, which many movie makers rightly rate of equal importance to outdoor shots. They can be made quite successfully by *f*/3.5 cameras; yet, as stop *f*/1.9 admits over three times as much light as stop *f*/3.5, you can quickly see that much less illumination is necessary for indoor movies with your *f*/1.9 camera.



Where *f*/3.5 lens equipped cameras must call "quits," the *f*/1.9 lens carries on. At the right are three typical "bad light" subjects as enlarged from the films of movie makers. The upper shot is an enlargement from the 8 mm. Kodachrome reels of Mr. U. G. Tilton of Dayton, Ohio . . . the middle shot, a 16 mm. Kodachrome daytime interior made by Mr. R. A. Sickles of Chicago, Illinois . . . the lower, a glimpse of "Treasure Island" by Dr. N. P. Dunne of Oakland, California.



This extremely handy little gadget is known as the Kodak Pocket Range Finder. You look through it, "pull" objects together vertically by turning a knurled ring, look at the scale—and there's your focusing distance.



The estimation of distances when focusing your movie camera should not prove a stumbling block, as most humans can judge distances with a fair degree of accuracy—which is all that is demanded by the average movie camera lens. But to those to whom the knack is denied, an extremely handy and inexpensive little device known as the Kodak Pocket Range Finder can be heartily recommended because it completely eliminates guesswork in focusing. You look into its eyepiece and see not only your subject but also a pointer and a translucent scale marked in feet. The upper half of the image of your subject will probably appear displaced horizontally from the lower half either to left or right. But when you turn a knurled ring in the proper direction, the two halves pull together. Thus perfectly matched, the distance indicated on the scale by the pointer—the Range Finder focuses down to 4 feet—is the distance from the camera to your subject. That's all there is to it. You read the distance while viewing the subject. The Pocket Range Finder is equipped with a fountain pen clip that secures it to your pocket. It will be found particularly helpful indoors where necessarily wide apertures make accurate focusing most important.

FOCUSING TERMS

You will find the terms, *Close-up*, *Semi-close-up*, *Medium Shot*, and *Distance Shot*, mentioned quite frequently in this book. So let's reach an understanding on just what they represent.

First off, it must be made clear that the camera distances at which shots will fall under these classifications vary widely with the subject. A head-and-shoulders shot of a human is a close-up. A head-to-waist shot is a semi-close-up. A head to feet view is a medium shot. And one showing your subject as but part of a general view would be a distance shot. The camera distances for these shots when made with a standard lens might be 6, 10, 15, and 100 feet, respectively. But a close-up of an individual object, such as a golfer's hand teeing up a ball, would be made as close as possible. The illustrations at the right clarify the subject.



This is an *average* close-up.



This is a close-up of an archer fitting arrow to bow.



This is an *average* semi-close up.



Here is a long shot of her about to loose the arrow at the target.



This an *average* medium shot.



This is a semi-close-up of her jotting down her score.

. . and this is an *average* distant shot.



And here is a close-up of her extracting the arrows.



Remember this above all other focusing facts: Close-ups are best. They really tell the story—more clearly, more interestingly. That's why the picture on the next page was filmed up close.

She: "That's perfectly true. We haven't half enough close-ups in our reels."

He: "No more 'backing up' for me in my picture making."



EXPOSURE

PROBABLY every reader of this book drives an automobile. You take terms such as *clutch*, *gear shift*, *brake*, *carberator*, *distributor*, and the like right in your stride. Just *how* these devices unite to make your car responsive to your wishes is of little importance to most of us. They do—so why worry about it.

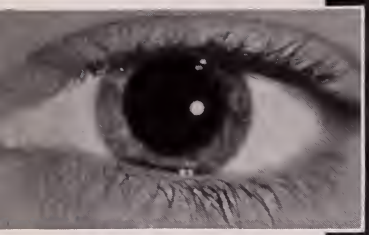
Which is exactly the attitude this book intends to take toward its own topic of home movie making.

But every now and then we are going to touch—just barely touch, mind you—upon a photographic principle or two so that you can more quickly get the hang of how that movie camera of yours looks at life. As a matter of fact, there's a striking similarity between the camera and a human eye. Both have lenses, both have diaphragms for controlling the amount of light allowed to pass through these lenses—in one case to reach the film—in the other to reach the retina (that part of the eye which receives optical images).

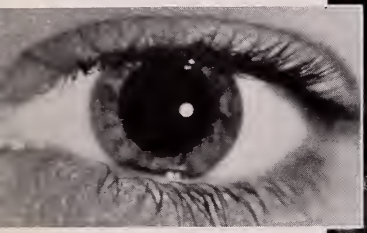
Whereas the diaphragm of the eye (more commonly called the iris) automatically adjusts itself to changed light conditions, not so with the

(*Continued on page 16*)

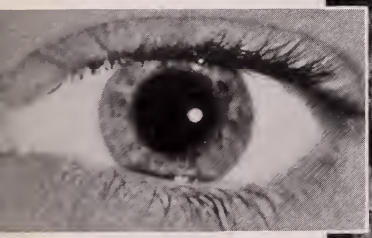




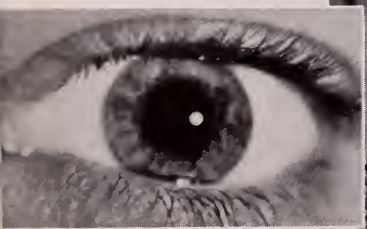
















f/1.9
"Open wide" is usually the technique required for filming subjects like this after dark.



f/2.8
Even though it's raining, this out-in-the-open scene is well-enough lighted for color filming at *f*/2.8.



f/3.5
It's bright in the sun, but this deep shade shot requires setting the diaphragm for the shaded side of the subject.

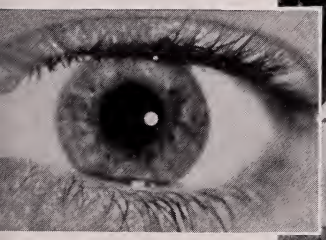


f/5.6
Not a ray of sunshine in sight—but still bright enough to make clear color movies at *f*/5.6.

COMPARE THE CAMERA'S "EYE" TO YOUR OWN

On these pages you see six different subjects filmed under light conditions ranging from nighttime outdoors to brilliant sunlight. Just as the pupil of your eye contracts or expands for changing light conditions, so should you "squint" or widen the camera's eye by means of the iris diaphragm.

All six subjects here appear almost equally clear and crisp. And so they should, when the camera's eye is squinted or expanded to offset varying light conditions. Equally applicable in theory to all cameras and all films, these examples are based upon the exposure of regular Ciné-Kodak Kodachrome Film.







***f*/8**

The average color scene in bright light calls for *f*/8.







***f*/11**

Only the most burningly-bright subjects require *f*/11 in Kodachrome.



PANCHROMATIC FILMS are exposed at different apertures under these same light conditions because most black-and-white films are somewhat faster than Kodachrome — especially for extremely brilliant sky and cloud scenes. Here, "Pan" films require greater allowances, as described over the page.



***f*/16**

You need never "stop down" to *f*/16 with Kodachrome.

(*Continued from page 12*)

camera. You must do the adjusting yourself. That is, you've got to set the diaphragm at a large opening for making pictures of poorly lighted subjects; you've got to stop down the lens when making movies of average and brilliantly lighted subjects.

Working with the camera's eye

Correct exposure hardly requires illustration. When you see it on the screen, everything looks just as you hoped it would. But some readers may not recognize over- and underexposure—and hence not know what to do in the future so that these unflattering "boners" do not again rear their ugly heads in the midst of a succession of correctly exposed scenes.

The illustrations at the left clarify the matter. Correct exposure was given to the many other illustrations in this chapter—the widely varying light conditions under which they were filmed are therefore not evident.

The "washed out" appearance of overexposure.



The crisp reproduction of correct exposure.



The dark, shadowy effect of underexposure.



The aperture of an iris diaphragm is divided into different "stops." On an *f*/1.9 lens these stops are termed *f*/1.9, *f*/2.8, *f*/3.5, *f*/5.6, *f*/8, *f*/11, and *f*/16. When it is desired to open the camera's eye wide, the marker for the iris diaphragm is moved to *f*/1.9 position. When the light is so intensely brilliant that your camera's eye should squint, you swing the marker around toward stop *f*/16. Between the two are logical divisions encompassing the range of light conditions commonly described as "Bright Sunlight," "Slightly Cloudy," "Dull, or in Open Shade," etc. Each change in diaphragm stops either halves or doubles exposure time. For example, stop *f*/5.6 admits twice as much light as does stop *f*/8—*f*/11 about half as much. There is, incidentally, no reason why you should not set your camera's diaphragm marker between stop markings when

light conditions justify this practice.

Interiors generally require the use of one end of the diaphragm scale—and they will be discussed in a future chapter on Indoor Movies. Brilliantly lighted exteriors are at the other extreme. Scenes on bright days, of the sea, sky, beach, snow, or distant landscapes are far removed from any general heading such as "Direct Sunlight." As it is with these extremes of the diaphragm scale that accurate exposure is most essential, let's start from the middle of the diaphragm scale and work out toward the ends. Though we are dealing here specifically with the use of black-and-white film, much of the information is equally applicable to full-color Kodachrome. For the few distinctions, see page 102.



An average-bright movie subject.



A brighter-than-average subject.



This is obviously far brighter than average, although the correct aperture selection here gives the scene average values.

A shot of the youngsters several feet distant on your lawn, for example, can safely be made by following the general classification on the exposure guide—that is, if the light is playing full upon that side of them facing you. This is the *average* subject—some dark areas such as grass, trees, the house; and some light areas such as light colored apparel and sky. But when you film the same children on the beach under the same sun, you should set your camera's diaphragm a stop smaller because there are fewer dark objects in the range of your camera. Your own eye will squint a bit for this brighter aspect, and so should the camera's eye be squinted. And if, in your next shot, you are seeking detail in a distance shot of the entire sun-swept area of sand, water, and sky, you should go still another stop smaller. The lawn scene, for example, might call for stop *f*/8. The children on the beach, stop *f*/11. And the long

shot of the beach *f*/16. And so, you see, here are three different subjects, all filmed on the same sunny day, but at three different lens settings.



He: **"Ouch! I think I know now why those few beach shots we made last month are a bit washed out. We made 'em with the same exposure we gave to the shots of the car as we started the trip."**

But there's a bit more to the story than this.

When you've grasped the simple truth that *all* subjects do not reflect the same amount of light under the same type of sky, you have the gist of the matter. That it may lead toward underexposure as well as overexposure is equally apparent.

Perhaps you will be filming on a bright, sunny day. The film you use may call for stop *f*/11. You take one or two shots on your lawn. Then you spy one of the youngsters playing on the front porch, decide to make a shot of him. It's still the same sunny day—but you are not filming a subject in the sun, so you must open up the camera's eye a bit.

So take your general light classifications for what they are intended to be —the *average* subject under any light classification. Study the light falling on your subject, *not* the light in which you may be standing. And study, too, the light-reflecting qualities of your subjects. For what the lens and film really see is reflected light—*not* humans, or houses, or hills. They are all present at night, but neither you nor your camera can see them until they reflect the light of the risen sun. Light-colored subjects quite naturally reflect more light than those of medium tone; dark-colored subjects less light. They appear so to the eye. And they appear so to your camera's eye. If *f*/8 is the correct diaphragm stop for general filming, use it to make a full-length shot of a smiling lady attired in pastel mousseline de soie. This is a scene of *average* color values. But if her costume is a dark wool alpaca, open up to stop *f*/5.6—an exposure procedure you would

reverse and go to *f*/11 if her choice of apparel were white linen.

But perhaps your lady is quite close to the camera—so close, in fact, that all you are including is her head and shoulders. If she is of average complexion—brown hair, ruddy cheeks, blue eyes—you'll film at the average exposure of *f*/8. But if she is very, very dark as to skin, hair, and eyes, you should open up a half stop more to allow for her swarthiness. And if she is very, very fair—blond hair, light blue eyes, and light skin—you should stop down halfway between *f*/8 and *f*/11.

Time of day affects exposure

All average exposure instructions, of course, are based upon midday light, and can safely be followed from 9 A. M. to 4 P. M. An allowance for weaker light before and after these hours is obviously necessary. How much allowance depends upon how much earlier or later you take pictures.

The season of the year, the latitude of your locale—these also frequently require an exposure allowance. A bright day in New England is never as brilliant as a bright day in the tropics. But it's brighter than Alaskan sunshine. How much more? How much less? That depends on how distant you are from temperate latitudes, on which exposure guides are based. And seasons similarly affect exposure. A winter's sun, when there's no snow on the ground, is not as bright as in midsummer. But when there's snow, scenes are probably brighter—about as brilliant as a beach sun. The snow is whiter than sand . . . the winter sun dimmer than in summer—results, all even.

Then, too, there's the matter of front, side, or back lighting. If *f*/8 is correct for a close-up shot of a young lady when the sun is playing full upon her *from the same side on which you stand with your camera*, it will obviously not be correct if you move around so that the sun is playing upon her from a 45° angle. Slide the aperture marker to *f*/5.6. And if you move still farther around so that the sun is hitting her at a 90° right angle, then you'd quite naturally make a bit more allowance—and open up a half stop more. And then, if you persist in circling cautiously about her, and the sun is playing upon her from the opposite side to you, still more allowance must be made. Whether the sun is coming at you head-on, or a bit to either side, doesn't matter—just so you can find a nice shadow in which to place your camera's lens. None of its rays are being reflected from your subject—so about two stops allowance would be in order. Or, in other words, to *f*/3.5 or *f*/4. The pictures on page 20 tell the story.

It's all a logical and easily understood application of the same simple principle. You'll probably get good pictures if you lump all scenes to-











IT'S THE *REFLECTED* LIGHT THAT COUNTS

If you gave equal exposure to the three subjects in the left column, above, because they were all filmed on the same bright day, you'd overexpose the upper and underexpose the lower scenes. And if you moved up close for head and shoulder shots, you'd be wise to give the blond young lady atop our second column a half stop less exposure than the brown haired miss in the middle. And the olive skinned girl at the bottom warrants a half stop extra exposure. The third column shows the one girl fully lighted by the sun, sidelighted, and backlighted — calling for an exposure range of two stops, as explained on the previous page.

gether, regardless of color values. But you'll get far better ones by taking into consideration a few known factors.

When making movies of two widely contrasting subjects, such as a ski jumper in a dark outfit on a snowy hill, you must decide where you want

detail. If you expose for the ski jumper, you are bound to overexpose the snow. And if you stop down for the snow, the ski jumper is going to be underexposed despite the great latitude of Ciné-Kodak Film. You have your choice, and you'll probably decide to expose for the snow in a distant shot, and then to move up closer, open up one stop, and get a semi-close-up of the ski jumper in which the snow will logically be of less importance.

EXPOSURE GUIDES

Properly setting diaphragms of Ciné-Kodaks for prevailing light conditions is quite simple, for Eastman-made cameras are equipped with a new-type exposure guide that shows at a glance the correct lens openings for all normal light conditions. These instructions are not intended to encompass every aspect of exposure. A sound and easily acquired knowledge of the purpose of the lens diaphragm plus a brief consultation of the guide, is ample insurance of correct exposure for average filming.

This guide, in itself, is worthy of description.

Until recently most movie cameras carried an exposure guide riveted to the camera just under the lens. And because most cinamateurs used standard panchromatic film prior to the advent of Kodachrome—Eastman's amazing full-color film, and the faster "X" black-and-white films, the guide was based upon the use of this standard panchromatic film. These new films, however, did not call for the same exposure as standard panchromatic, and, although it was not difficult to expose them by a rule of thumb such as "one stop faster" or "two stops faster" than the old guide, it was also easy to forget these factors and to expose an occasional shot without making an allowance for the different speeds of the different films. A new and all-inclusive guide—the Ciné-Kodak Universal Guide—was therefore developed.

CINÉ-KODAK UNIVERSAL GUIDE

All new Ciné-Kodaks are being delivered with the Universal Guides attached to their cover sides. All Ciné-Kodaks in use can be quickly and inexpensively fitted with them. A pocket model of the Ciné-Kodak Universal Guide is also available separately.

It consists of a rectangular chromium plate. In its center is a dial. At the right of the dial, on metal, are engraved the various lens apertures. To the left of the dial is a niche to hold a tiny card showing all normal light conditions.

With each Ciné-Kodak, and with each Universal Guide sold separately for vest-pocket use, is packed a complete set of black-and-silver cards

to fit into this niche to the left of the dial—one card for each film available for the particular camera with which the guide is to be used. When you use the regular black-and-white film, you slip the card for this film into the guide. When you use the faster "Super-X" or "Super-XX," or regular or Type A Kodachrome, you slip into the guide the card for whichever of these films is loaded in the camera. One side of the card gives the light classifications for the outdoor use of its particular film. The other side is for Photoflood use.

The right (*f*/ value) side of the dial indicates the aperture stops for your camera and makes a distinction between Dark, Normal, and Light subjects. The left (light classification) side of the dial varies somewhat with the taking speeds of individual cameras—embossed rules aiding positioning when cameras have two or more operating speeds, such as 8, 16, 32, and 64 frames per second. You merely set the left side of the dial for the type of lighting under which you are filming—indoors or outdoors—and the camera speed at which you operate (if your camera offers a choice of speeds), read the correct aperture as indicated by the arrow on the right side of the dial, and set the lens at that opening. That's all there is to it. It works equally well for every film.

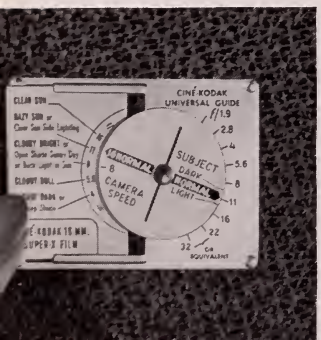
New Ciné-Kodaks, as has been said, are equipped with the Universal Guide. Ciné-Kodaks acquired before the introduction of the Universal Guide can be fitted with it for a charge of one dollar if you take or send your camera to your dealer for the addition of the Guide and the removal of the old built-in guide for "Pan" film located on the front of the cameras. Or a $1 Pocket Model of the guide may be obtained from your dealer for use with any amateur movie camera loading with Ciné-Kodak Film—likewise for a charge of one dollar.

EXPOSURE METERS

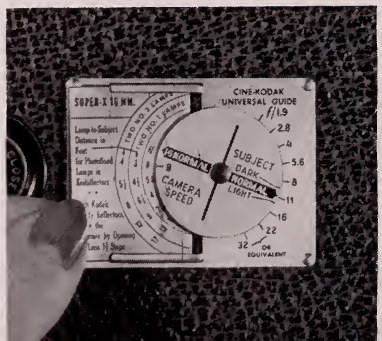
Use of the Ciné-Kodak Universal Guide, plus an understanding of the few principles previously outlined in this chapter, should fit you to obtain excellent exposure for all subjects under all normal light conditions.

Yet some readers will wonder where exposure meters fit into the picture.

One side of the card covers outdoor exposure conditions. The other side covers exposure under Photofloods in Kodaflector.



Set the left arrow for existing light conditions . . . take your aperture reading from the right arrow . . . then set the lens at the indicated aperture.





Frankly, they are not *necessary* to good movies. But to say that they are not helpful would be ridiculous. They most certainly are—when properly understood and used.

If exposure estimation is your blind spot—and this is seldom the case—ask your dealer what type of exposure meter he would recommend for use with your camera.

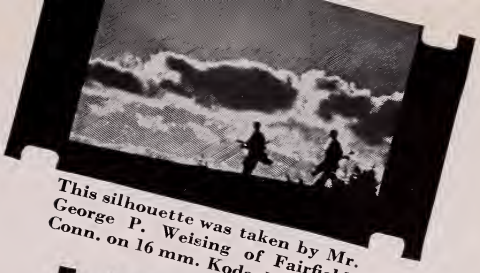
The conclusion of this discussion does not mean that we have finished with exposure. The subject will crop up again occasionally in our chapters on filters, films, indoor and nighttime movies.

OUTDOOR SILHOUETTES

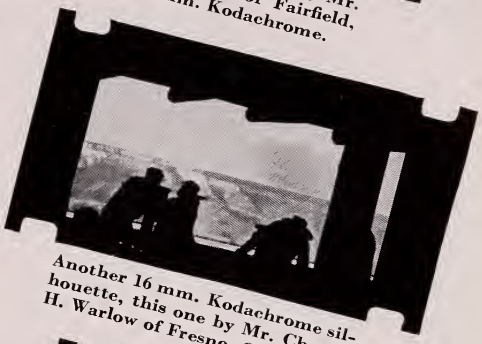
There are countless subjects—a few of which appear on this page—which gain in beauty because there is not enough light to permit correct exposure. Most of these, quite naturally, will be made at sunset or sunrise—a figure, a tree, or a building, silhouetted against a background of sky and clouds.

At other times the same effect can be achieved by setting your exposure for the brightest part of your picture and deliberately underexposing the darker areas.

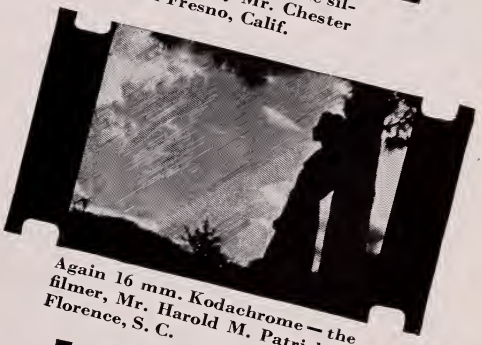
Then again, striking silhouettes can be obtained at midday in a bright sun by giving a scene which should, for example, receive an $f/5.6$ exposure so as to permit registration of shadowy areas, deliberate underexposure at $f/11$ or $f/16$. This phase of picture making is merely another



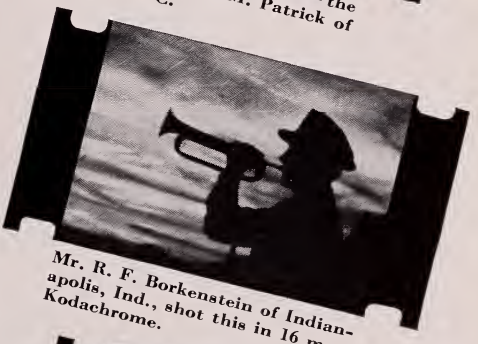
This silhouette was taken by Mr. George P. Weising of Fairfield, Conn. on 16 mm. Kodachrome.



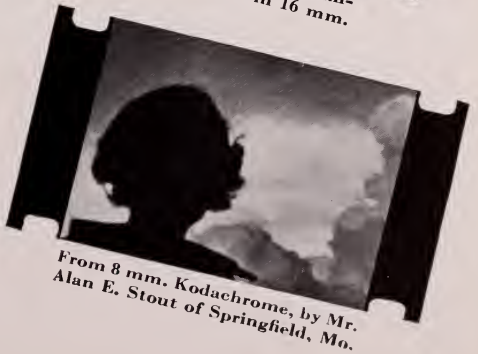
Another 16 mm. Kodachrome silhouette, this one by Mr. Chester H. Warlow of Fresno, Calif.



Again 16 mm. Kodachrome—the filmer, Mr. Harold M. Patrick of Florence, S. C.



Mr. R. F. Borkenstein of Indianapolis, Ind., shot this in 16 mm. Kodachrome.



From 8 mm. Kodachrome, by Mr. Alan E. Stout of Springfield, Mo.



Mr. Hamilton Jones of Buffalo, N. Y., made this fast-moving 16 mm. black-and-white diving shot . . .



. . . while Mr. Charles Goldsmith of Forest Hills, N. Y., rightly devoted many seconds to this majestic waterfall scene.

example of the application of common sense to known factors.

Nor are these the only ways to make silhouette movies. On page 118 you will learn that indoor silhouettes are equally easy and effective.

SCENE LENGTH

This is a subject which is often dismissed with the advice, "Eight to ten seconds will suffice for the average scene."

And so it will. But let us go back to a few more fundamentals.

When operated at normal speed all amateur movie cameras expose sixteen frames a second. In other words, in every second, the film is pulled forward, and momentarily stopped, for images to be recorded on sixteen consecutive frames of film—each frame capturing approximately 1/32 of a second's action. This stopping and starting is too fast for the eye to catch as you watch the film run through the camera. Which is the basic principle of movies, for, at normal projection speed, the film is likewise shown at a rate of sixteen frames a second, and your screen images give the illusion of continuous action.

The number of seconds you hold your finger on the exposure button, however, should be determined by the character of the subject being filmed. A shot of a golfer driving a ball can be brief—four or five seconds, perhaps—starting with the preliminary waggle of the club and ending with the follow-through. But a general view of the golf course should be at least ten seconds in length. Again, a shot of a waterfall, which fascinates by its continuous tumbling and leaping, can very well be of even greater duration. So much for individual shots.

Varied scene length brings pace to your movies

A reel, to be most interesting, should be a happy intermingling of long and short shots. For example: a 10-second view of a child admiring a candy store display; a 4-second close-up of his yearning countenance; a 6-second shot of his mother smilingly observing the youngster; two



She: **"Now there's an obvious idea that we've missed! It's never occurred to me to vary the length of shots."**

5-second views of her questioning and the boy eagerly replying; another brief shot of the two entering the shop; a 12-second close-up of the child rapturously devouring a "double-decker" ice cream cone.

That's a properly paced sequence.

Which brings us our next, and final, application of tempo as influenced by scene length.

The exception to the rule of blending long and short shots is when you want the tempo of your movie story to reflect that of your subject. For example: a series of excitingly brief shots of whirling polo ponies and riders to precede the actual making of a goal, or, several 10-second shots of moss draped trees and dipping paddles to convey the leisurely pace of a trip through the Everglades.

A point to keep in mind is that any overly long movie scene can always be trimmed to length on a splicing block and the best of it preserved. But a short scene cannot be stretched.

More about editing in a later chapter.

SIGHTING

The position in which you hold your camera is really of importance for the reason that it has much to do with the steadiness of your screen pictures.

There is only one best way to hold a camera such as Ciné-Kodak, and that is to hold it somewhat as you would a gun. Right hand braced around the back of the camera, elbow braced against your side; left hand, palm up, cradling the front of the camera, and left elbow also against your side. The steadiness resulting from bracing with the elbows against your side, or on some steady support such as a railing or wall, should be aided and abetted by resting the camera against the right cheek.



He: "What did I tell you! Now will you abandon that interlocking grip you've insisted upon using?"

She: "Humph. I've a good mind to get a tripod so you won't have anything else to complain about."

Not a few movie makers, in fact, would not consider exposing even a foot of film without securing their cameras to tripods. Yet this, though an excellent plan, is cutting things a bit too fine for many cinamateurs. Amateur movie cameras can be hand-held with sufficient steadiness for all average shots with standard lenses. But *not* with telephotos, as will be discussed later. A firm and correct grasp of the hands is the proper recipe for hand-held cameras—if two additional precautions are exercised.

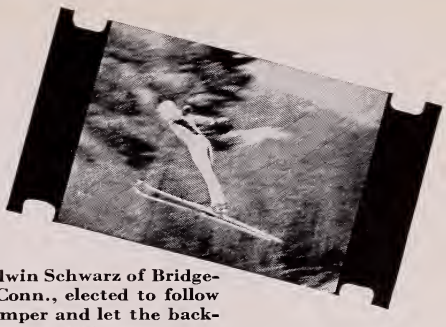
These are a general avoidance of following action and panoraming. Both are practices especially tempting with a movie camera for the probable reason that they are impossible with a snapshot camera. But, as a general rule, both should be avoided.

Your camera should record action—not provide it

If, for example, your camera target is a youngster and a pup frolicking about the lawn, it is extremely easy to yield to the cinematographic freedom of following them to and fro with the camera. But don't do it. For, if you do, your screen results are going to be rather hard on the eyes. In most instances the action would not take the subjects beyond the field of view of the camera's lens. This being true, why not hold the camera rock-steady, and keep the motion and excitement in the subjects instead of in the camera? And, if they *do* romp out of sight, this is your cue to take a new vantage point with your camera for the making of a succeeding shot. Move up closer, move back a bit, shift to the right or left—far too many movie subjects are filmed in but one shot of extended duration, or in several shots of equal duration filmed from the same position. A change of pace makes a film lively and interesting.

Following action is equally alluring. There are, of course, occasions when it is wholly permissible. Quite often when you are filming fast moving

objects with your camera, the center of interest is the action. By keeping it in the center of the finder you will inevitably blur the background of spectators and scenery—but, in this instance, the background is unimportant.



Mr. Edwin Schwarz of Bridgeport, Conn., elected to follow the jumper and let the background come as it may.

Yet action which you can film-and-follow from a good vantage point is the exception. Most fast moving objects should be filmed from an acute angle to the path of action, or from directly behind or before the path of action—*never* at right angles.



While in this 16 mm. movie shot Mr. H. E. Kjorlie of Nevada City, Calif., filmed with a rock-steady camera from an acute angle.

But it is not with such a subject that movie makers customarily "fan" the landscape with their cameras. By far the greater proportion of panoraming is bestowed upon stationary objects such as scenery. The reason, doubtless, is solely a desire to capture as much of the beauty of the scene as possible in a slow swing from left to right somewhat as the human eye would view it. The practice is not entirely without merit when indulged in rarely and when the "pan" is made very s-l-o-w-l-y and very s-m-o-o-t-h-l-y—such as can be done with a velvety-action tripod head—and when the movie maker is not carried away with enthusiasm to a degree suggesting that he make a return panoram from right to left to his starting point. But, as a matter of fact, the human eye *does not* panoram slowly and evenly. It rests upon one point of interest in a scenic—generally far longer than is possible in even a slow panoram—and then leaps to the next point of interest. And this is what you should generally do with your movie camera—except that a record of the intervening, uninteresting areas past which the eye so nimbly skips should be omitted entirely from the home movie record.

If you must *panoram*

Yet, if you must weaken occasionally and panoram on some stationary object, make sure that it is a distant one. *Never* "pan" on nearby objects. Start panorams with an object of lesser importance; swing slowly to the most important object in the field of view. And don't *start* panoraming at

the very beginning of your scene, or *stop* exposure the second you reach the end of your slow swing. Hold your camera steadily on your first view for a moment, "pan" slowly, hold it on your last view even longer—finis.



She: "And just who is it in this family that handles the camera like a garden hose?"

He: "Don't interrupt, please."







FINDERS

The front and rear finders of eye-level finder systems are separated from the camera lens vertically by an inch or two. Obviously therefore, both finders and lens cannot "see" the same field . . . they cannot be in perfect alignment on all subjects at all distances. The point of intersection is quite logically upon subjects at medium distances from the camera. Distant subjects, because of the considerable area being covered by both finders and lens, need not cause concern. But close-ups are a different matter.

If you fill the *finder* with the head of a subject only a few feet distant from the camera, you will inevitably lop off the top of your subject's head on the *film* because the line of fire of the lens is lower than that of the eye-level

At the left, above, is what happens when you attempt close-ups without raising your camera to clear a subject's head with the "2 ft." indicator. Below it is the same close-up correctly sighted. And you really get more of close-up scenes at the bottom of the image than is indicated by the finder—as is shown by the lower illustration.

finders. This inhuman practice can easily be avoided by allowing a comfortable clearance above the head as seen in the front finder. Just how much clearance depends upon the proximity of the subject to the camera. Most cameras have engraved rules on the glass of the front finders, or minute pointers on the finder frames, which are labeled, perhaps, "2 feet" and "6 feet." When these ruled lines clear heads at these distances, cinematic scalping will be avoided.

The same precautions should be observed when using telephoto lenses for nearby objects because they, at varying distances depending upon their focal length, likewise make close-ups. The front finders of telephotos, or their finder masks, also carry markers cautioning you against filling the finders or masks at short distances. A more detailed description of telephoto lenses is contained in a succeeding chapter.

CARE OF CAMERA

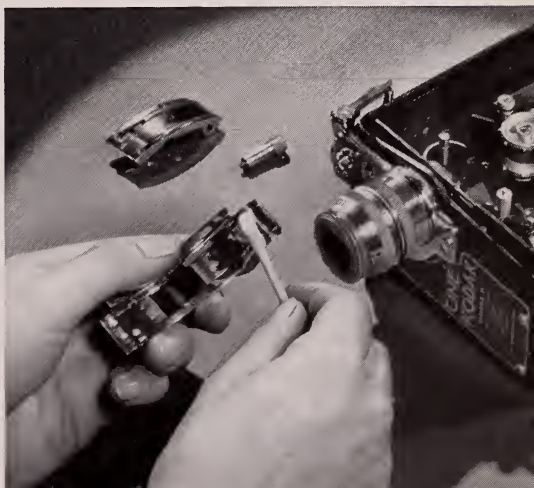
Your camera manual outlines the few precautions necessary to its smooth performance. Wise movie makers will do well to check on these points every few months. But one safeguard should be observed every time you remove the camera from its carrying case—and this is to make certain that the lens is clean.

Fingerprints, moisture, dust particles—any substance which finds its way to the surface of the lens—will be reflected in the loss of clarity of your screen pictures. Polish the lens surface as directed by the manual. If the lens is removable, the rear element of the lens should likewise be cleaned.

A second precaution of frequent value is to clean the gate of your camera. This simple safeguard is also detailed by your camera's manual. Disregarded, your finished pictures may suffer from bits of emulsion lodged in the gate which make their presence known by vertical scratches on the

Cleaning the lens and gate is a safeguard easy to forget and equally easy to do. Are there any other precautions mentioned in the manual for *your* camera?





film surface. And, in extreme instances of clogged gates, even the focus and actual running of the camera may be affected.

And now we're ready to delve briefly into the matter of film.



She: "When did we last clean our camera?"

He: "We didn't. I'll have our dealer give it a check-up tomorrow."

FILM

THE next step is to load the camera. As this elementary procedure is amply cared for by instruction manuals, we find ourselves confronted almost immediately with another matter—what kind of film should be used in the camera?

But before briefly discussing the properties of films, it might be wise to mention Ciné-Kodak film processing, or finishing, which is done in Eastman laboratories without additional charge.

Ciné-Kodak black-and-white film receives Eastman's exclusive *automatic corrective processing*. This is far more than a phrase. It means that thousands of feet of film are saved yearly for movie makers who temporarily overlooked resetting the camera diaphragm for changing light conditions. If, for example, the correct diaphragm stop for the next subject at which


KODACHROME
MAGAZINE
CINE-KODAK



you point your camera is $f/5.6$ and you expose at $f/8$, you will have done far more than miss the correct marking on your exposure guide by a fraction of an inch. You will have, in fact, exactly halved the amount of light which the subject should receive. If you miss it by two stops and expose at $f/11$, you will be halving this half. Inversely, if you give a scene a stop too much light, you double the exposure. Yet, with Ciné-Kodak black-and-white film finished by an Eastman processing station, you will probably receive satisfactory movies. Were it not for Eastman's corrective processing method, even the wide latitude of Ciné-Kodak Film could not save images so drastically handicapped in exposure.

The mystery of this corrective processing can perhaps best be explained by stating that when film is finished by the reversal process (which means that the film you project in your Kodascope is the same film that you exposed in your Ciné-Kodak) it is given a second, or printing, exposure as one of the steps which result in a black-and-white positive image for you to project. Just as in making ordinary snapshot prints, this printing exposure must be adjusted to suit the original exposure on the negative. If the

The strip pictures at the left are enlargements from two rolls of black-and-white Ciné-Kodak Film exposed throughout the full range of diaphragm stops. The left strip received ordinary processing. The right strip, Eastman's automatic corrective processing. Note its remarkable compensation for over- and underexposure.

movie film was given too much exposure in the camera, heavy printing is necessary to give you a satisfactory picture from the little material left to form the positive image. If it was originally underexposed, the reverse is true. These same principles apply to finishing by the reversal process. To get best results the second, or printing, exposure must be accurately adjusted to suit the exposure originally given in the camera.

At one time exposure errors were somewhat corrected in printing by a watchful attendant. But even the most alert human cannot match wits with a scientifically designed mechanical device. At Eastman laboratories such a device is built around a tiny photoelectric cell which scans the negative images and controls the quantity of printing light given to each scene. This almost instantaneous compensation for exposure errors makes it possible to return to movie makers reel after reel of uniform density in which evidence of inaccurate exposure is barely perceptible. The two strips on the preceding page tell the story.



As to the life of Ciné-Kodak Films, the following is of interest. Home movie fans have reels of black-and-white Ciné-Kodak Films exposed over a decade ago, which are today in every way capable of producing satisfactory screen images. Kodachrome Film, of course, is still too new to permit any definite statements being made as to its longevity.

Four films for "Eights" . . . Five for "Sixteens"

For most 8 mm. cameras, there are four different Ciné-Kodak Safety Films supplied in 25-foot rolls, 16 mm. wide: Ciné-Kodak Eight Panchromatic Film, Ciné-Kodak Eight Super-X "Pan," regular Ciné-

Kodak Eight Kodachrome Film, and Ciné-Kodak Eight Kodachrome, Type A, Film for artificial light. Each of these four is exposed in Ciné-Kodaks Eight along one half of its width, and then inverted and exposed on the other 8 mm. width. After processing it is slit down the middle, spliced end to end, and returned as a 50-foot roll, 8 mm. wide—the equivalent in projection time to a 100-foot roll of 16 mm. film.

There are five Ciné-Kodak Safety Films supplied for most 16 mm. cameras: Ciné-Kodak Safety, Ciné-Kodak Super-X Panchromatic, Ciné-Kodak Super-XX Panchromatic, Ciné-Kodak Kodachrome (Regular), and Ciné-Kodak Kodachrome, Type A. All but Ciné-Kodak Safety Film are supplied in 50-foot magazines, 50-foot rolls, 100-foot rolls, and also in 200-foot rolls for that super-versatile camera, the Ciné-Kodak Special. "Safety" Film is supplied in 100-foot rolls only.

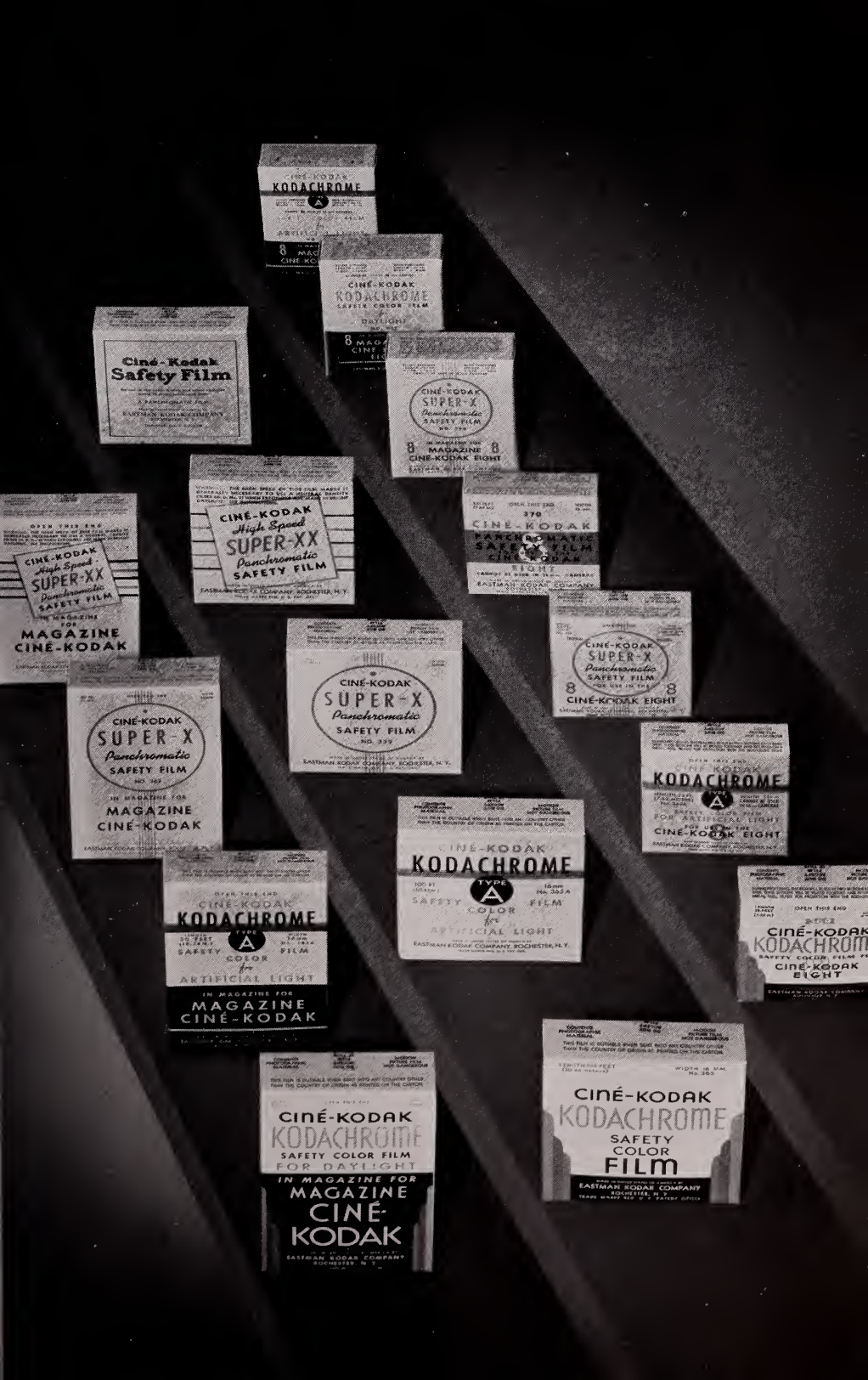
Extra Footage not for Picture Making

None of these films are supplied with paper leader or trailer strips. Even though, when loading and unloading, you must inevitably fog a foot or two at the beginning and end of each roll, do not feel that you are wasting any of the represented footage. There are, for example, 8 extra feet of film on every roll of 8 mm. film and on every 50-foot roll of 16 mm. film, 9 feet on every 100-foot 16 mm. roll. This extra footage protects the beginning and end of each roll, and most of it is cut off in the processing "lab." You can "fog" it without wasting any of its specified footage. But don't try to take pictures on this extra footage. Observe the footage indicator, as described below.

If yours is a magazine-loading camera, you need not worry about the matter. If your camera uses roll film, pull out only enough film to properly thread the camera and start the film on the take-up spool. After loading your camera and replacing the cover tightly, take a look at the footage indicator. If you own a roll-loading Ciné-Kodak Eight, the indicator will show a fixed pointer and four horizontal lines opposite the number "25." If yours is a current model 16 mm. roll-loading Ciné-Kodak, the indicator will show a fixed pointer and six horizontal lines opposite the number "100," or three lines opposite the number "50." Before taking any pictures with either camera let the motor run until the indicator moves a distance equal to the space between two of these lines.

Stop taking pictures with both 8 mm. and 16 mm. Ciné-Kodaks when

The wide variety of 8 mm. and 16 mm. black-and-white and full-color Ciné-Kodak Films available makes it easy for movie makers to shoot good pictures indoors as well as outdoors, in winter as well as in summer, at night as well as in the daytime.


Ciné-Kodak
Safety Film
CINÉ-KODAK
KODACHROME
CINÉ-KODAK
KODACHROME
SAFETY COLOR FILM
DAYLIGHT
CINÉ-KODAK
SUPER-X
Panchromatic
SAFETY FILM
MAGAZINE
CINÉ-KODAK EIGHT
CINÉ-KODAK
High Speed
SUPER-XX
Panchromatic
SAFETY FILM
EASTMAN KODAK COMPANY, ROCHESTER, N.Y.
CINÉ-KODAK
SUPER-X
Panchromatic
SAFETY FILM
NO. 339
EASTMAN KODAK COMPANY, ROCHESTER, N.Y.
CINÉ-KODAK
KODACHROME
TYPE A
SAFETY COLOR FILM
for
ARTIFICIAL LIGHT
IN MAGAZINE FOR
MAGAZINE
CINÉ-KODAK
CINÉ-KODAK
KODACHROME
SAFETY COLOR FILM
FOR DAYLIGHT
IN MAGAZINE FOR
MAGAZINE
CINÉ-
KODAK
EASTMAN KODAK COMPANY
ROCHESTER, N.Y.
CINÉ-KODAK
KODACHROME
SAFETY
COLOR
FILM
EASTMAN KODAK COMPANY
ROCHESTER, N.Y.

the indicator pointers are opposite "0," but continue to run the camera motor until the indicator pointer is at the word "EMPTY." Cover the exposed film with its metal container as soon as you open the camera. Do not try to expose pictures before the registered limit of the film's capacity, or after the indicator points to "0," and you will obtain the exposed footage for which you have paid without having any of your scenes lightstruck.

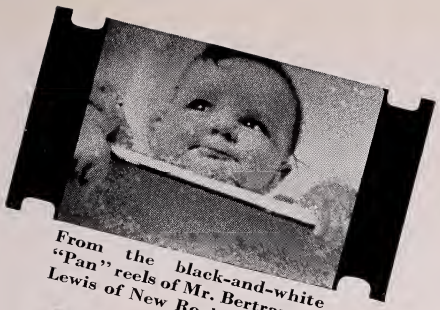
Ciné-Kodak Super-X Panchromatic Film, 8 mm. or 16 mm.

The superb quality, fine grain, great brilliance and speed of "Super-X" make it the ideal film for general outdoor and indoor black-and-white filming. To lapse into photographic terminology, "Super-X Pan" is sensitive to the full color range of light and therefore reproduces, in monochrome, all of the colors of nature in various shades of gray that correspond to the brightness of the original colors. While these words may not mean much to the uninitiated, the benefits of "Super-X Pan" are immediately noticeable on the screen.

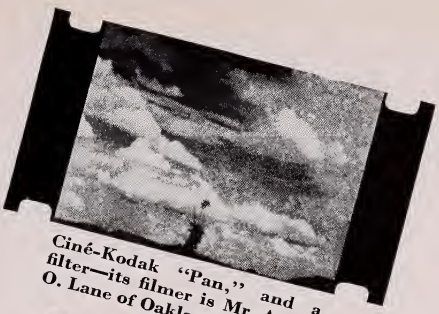
Do you recall, not so many years ago, the photographic quality of professional movies? Practically everything was either black or white—the blacks were very, very black, and the whites were just a bit muddy. That was in the days when the heroine would wear red when the scenario called for a black costume, because red, registering scarcely at all upon the film, would photograph black. Light blue eyes, on the other hand, registered far more quickly than other colors and were thus often overexposed—which explained the studio popularity of dark-eyed sirens during that era.

But today professional movies exhibit scene after scene of breath-taking beauty—the details of landscapes are reproduced in many different tones of gray, blue-eyed beauties are abundant, and sky and clouds, which should play an important part in every scenic, are reproduced in their proper values of grays and white. As most professional movies are likewise made on Eastman Panchromatic Films, it is obvious that the popularity of Ciné-Kodak Super-X Panchromatic Film is justified.

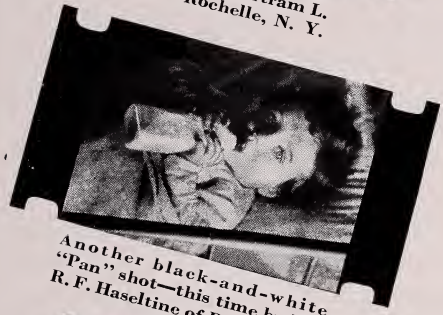
With "Super-X Pan" you can film subjects outdoors from dawn to dusk, and indoors under artificial light. This latter field for movie making need not arouse visions of batteries of lights, reflectors, a disordered household, and uncertain results. For, as you will learn from a future chapter on indoor movies, Eastman's Kodaflector, weighing scarcely more than your camera, costing about what you pay for a roll of film,



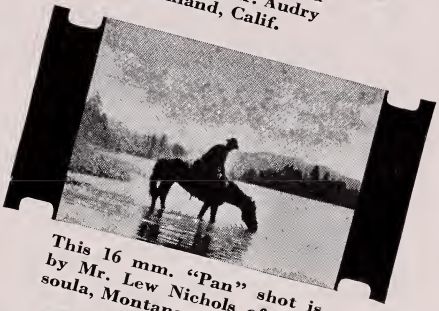
From the black-and-white "Pan" reels of Mr. Bertram L. Lewis of New Rochelle, N. Y.



Ciné-Kodak "Pan," and a filter—its filmer is Mr. Audry O. Lane of Oakland, Calif.



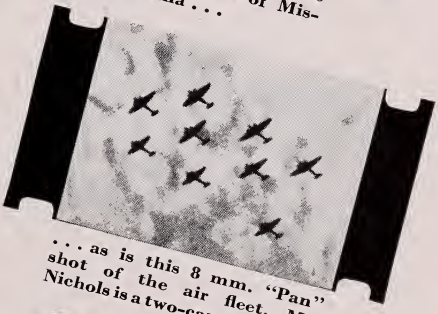
Another black-and-white "Pan" shot—this time by Mr. R. F. Haseltine of Rutland, Vt.



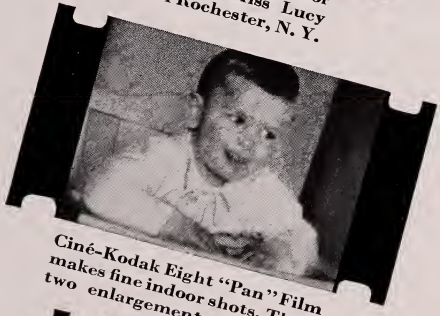
This 16 mm. "Pan" shot is by Mr. Lew Nichols of Missoula, Montana . . .



Once more 16 mm. This indoor shot was made by Miss Lucy Shoemaker of Rochester, N. Y.



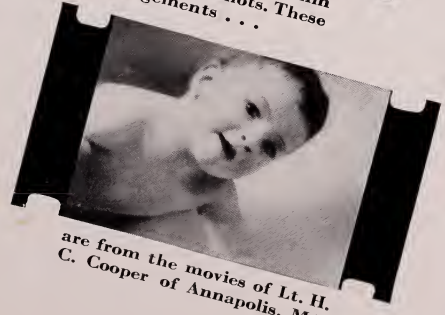
. . . as is this 8 mm. "Pan" shot of the air fleet. Mr. Nichols is a two-camera filmer.



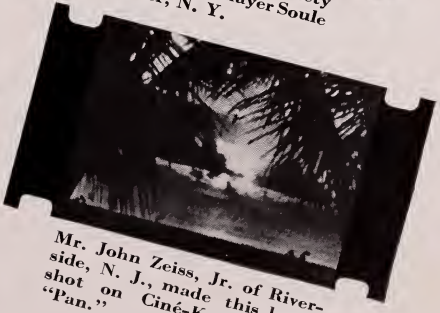
Ciné-Kodak Eight "Pan" Film makes fine indoor shots. These two enlargements . . .



Made on Ciné-Kodak Safety Film by Mr. Karl Thayer Soule of Rochester, N. Y.



are from the movies of Lt. H. C. Cooper of Annapolis, Md.



Mr. John Zeiss, Jr. of Riverside, N. J., made this lovely shot on Ciné-Kodak Eight "Pan."

will supply light that is both ample and constant. Hence, indoor movies are as easy as rolling off a log—as the indoor exposure instructions of the Ciné-Kodak Universal Guide (see page 22) indicate. When you have your lights six feet from your subject, you set the lens aperture at one point; when closer or more distant, you set it at another clearly indicated point. You simply can't go wrong.

Although not as fast as 16 mm. "Super-XX Pan"—described below—practically everything which can be filmed outdoors or indoors with "Super-XX" can also be filmed with "Super-X," by the use of a slightly wider lens aperture outdoors, or by using your lights a bit closer indoors.

Ciné-Kodak Super-XX Panchromatic Film, 16 mm.

Here's a super-fast black-and-white film that enables you to make movies indoors by the light of *ordinary* Mazda lamps, as well as outdoors much earlier or later in the day, on days when clouds are heavy, in pouring rain, and after dark on brilliantly lighted streets. Recommended for football coaches and other gridiron filmers who want to make slow-motion movies or use telephoto lenses late in the game when shadows darken the playing field. The ideal film, also, for photographing such well-lighted nighttime events as basketball games, wrestling matches, hockey games, and night baseball games.

Although Ciné-Kodak Super-XX Panchromatic Film is primarily for making pictures under the conditions just described, it may occasionally be desired to use the film in bright sunlight. Under these conditions, it will be necessary to place a neutral density filter (N.D. 2) over the lens.

Because Super-XX "Pan" is extremely sensitive to light, users of this fast film should be especially careful not to load or unload their cameras in bright sunlight or in brilliant artificial light.

Ciné-Kodak Safety Panchromatic Film, 16 mm.

This low-price 16 mm. "Pan" film, amazingly fine grain, may best be described as a general-purpose film, for use when the special capabilities of the other 16 mm. Ciné-Kodak Films are not required.

Ciné-Kodak Safety "Pan" is available in 100-foot rolls, only. It is not supplied in film magazines.

Ciné-Kodak Eight Panchromatic Film

This black-and-white film is the 8 mm. counterpart of the 16 mm. film described directly above. Its fine definition and uniformly high quality make it an excellent all-round film for average outdoor filming.

Ciné-Kodak Kodachrome Daylight Film 8 mm. or 16 mm.

Kodachrome—movies in full color—seems incredible even when you see it on the screen. Without fuss or gadgets, Kodachrome reproduces colors with startling realism. All reds are not one red—nor all blues one blue. Every subtle shading will be found in Kodachrome.

In the belief that you are more interested in knowing how to use this film than in what makes it "tick," our description of Kodachrome will largely be confined to a later chapter dealing solely with the few problems of Kodachrome filming. Kodachrome is generally exposed without a filter, and with accessory lenses as well as with standard lenses. It is always projected without a filter. Any standard 8 mm. or 16 mm. camera will load with Kodachrome. Any 8 mm. or 16 mm. projector will show Kodachrome with the full brilliancy of black-and-white—without lines, pattern, or fringes on the screen.

There are truly few occasions outdoors when you cannot use Kodachrome every bit as effectively as you can black-and-white. For indoor full-color filming, other than that done in sun-lighted rooms for which regular Kodachrome should be used, Eastman makes a special film described below—Ciné-Kodak Kodachrome, Type A, for artificial light. Yet regular daylight Kodachrome can now be used indoors with comparable ease when blue Daylight Photofloods are fitted into Kodaflectors to color-balance this outdoor film for indoor use. This is discussed in the *Movies at Night* chapter of this book, starting on page 111.

On dull days and on bright, indoors under artificial light as well as outdoors in brilliant sunshine, this remarkable photographic process is proof positive that although nature is indeed wonderful, the fruit of human ingenuity is sometimes scarcely less so.

Ciné-Kodak Kodachrome, Type A, 8 mm. or 16 mm.

This film has been introduced for a specific purpose—indoor color movie making under illumination supplied by Mazda Photoflood lamps. Color-balanced for just this type of light, no filters are required. This fact, plus the amazing speed of the film, makes indoor full-color filming every bit as easy and certain as black-and-white. "Corner" shots give way to full-view shots in any average-size room under the light supplied by inexpensive Photoflood lamps in Eastman's twin-reflector $5 Kodaflector.

And indoor color movies are so genuinely beautiful!

Your family and your friends against the colorful and tasteful background of your home—what finer subjects are there for movie making?

Groups about the gayly decorated Christmas tree, a proud youngster before the inviting icing and flickering candles of a birthday cake, a pink and boisterous baby in a bathtub, your best friends moving about your home at a buffet supper and game party—here, indeed, is the finest movie material of all. You can film it all in full color, without fuss, by merely following the simple instructions packed with each roll of Kodachrome, Type A, and described in greater detail in a later chapter on Kodachrome.

Can be used outdoors, too

Although developed expressly for use without a filter indoors, Type A Kodachrome can be used under the sun outdoors by merely slipping a *Type A Kodachrome Filter for Daylight* over the camera's lens to color-balance the film for natural light. The use of this essential filter in no way retards the unusual speed of this film, nor restricts the range of its use. Indeed, when you know that you must use one roll of film for color shots in both natural and artificial light, "Type A" can be counted on to fill the bill. It should be exposed exactly as unfiltered regular Kodachrome.

FILTERS

AT ONE TIME or another you have probably seen black-and-white home movie scenics, which, although apparently correctly exposed and focused, were woefully lacking on the count of beauty. They were, you rightly felt, not at all like those lovely scenic shots you have so often enjoyed on the professional screen. And you perhaps also felt that this difference was unavoidable—the inevitable gap between the capabilities of amateur and professional equipment. On this point, however, you would be way



She: **"Filters! I'm afraid this is going to be so much Greek to me."**

He: **"We've been told to use 'em often enough. Here's our chance to learn how."**





A filter is not just an accessory for more advanced cameras and advanced movie makers. It improves with equal efficiency the movies made by the simplest cameras. And with equal ease.

off the target. For the chances are that the only thing that stood in the way of the success of the amateur-made scenic was an investment of a dollar or two for a little gadget known as a color filter. They are available for all of the lenses supplied for all Ciné-Kodaks.

Scenics are composed of grass, foliage, trees, sky, clouds, *and distance.* And a color filter improves the reproduction of every one of these items on black-and-white film—including distance.

Let us first briefly describe the "why's" of filters. Then the "how's."

The spectrum of sunlight can be divided into three rather distinct color groups. In the middle are the blue, green, yellow, orange, and red rays. You can see these rays, whether you know it or not, for they are the ones that make you squint on sunny days. Then there are two groups of rays you can't see. First, the ultra-violet rays, which, although invisible to you, are readily perceived by film—and it is with these rays that you need be chiefly concerned. Secondly, the infra-red, or heat rays. You needn't worry about them, because movie film doesn't give them much of a tumble, although it may be interesting to note that there are "still" camera films made which will take pictures by the heat of an electric iron in darkness so intense that a cat would stumble into a piano.

Ciné-Kodak Panchromatic Films, as stated in a brief description of these

films in the preceding chapter, will best reproduce all colors in their correct monochrome relationship. Or, in other words, in relative tones of gray. But a scenic, because of the preponderance of ultra-violet rays from the sky, is not an average scene. The sky, in every scenic, should represent either a third or two-thirds of the picture area. (This, as described in a later chapter on composition, solely because your scenes will look far better when so filmed than when the horizon line is in the middle of your picture.) As the blue-violet rays from the sky generally register as rapidly on the film as those from clouds, with the result that the clouds may not be at all visible, you are likely to have a rather bleak and uninteresting sky and cloud area and thereby lose much of the true beauty of your scenic. Right here is the chief distinction between scenics made by many amateur cinematographers and those made by professionals. The latter invariably use filters to obtain positive separation between sky and clouds.

Yellow and red filters most popular

Color filters do not impart any color to your films. They are called color filters because they make possible varying degrees of control over colors to which films are sensitive. To cling to our expressed purpose of avoiding non-essentials, we will confine our description to the only two filters which you will probably ever need when using black-and-white film —the yellow filter and the red filter. These are the two which hold back the blue rays from the clear sky so that it, as reproduced by "Pan" film, appears gray in contrast to the white clouds. Just what shade of gray depends upon the filter and diaphragm stop used.

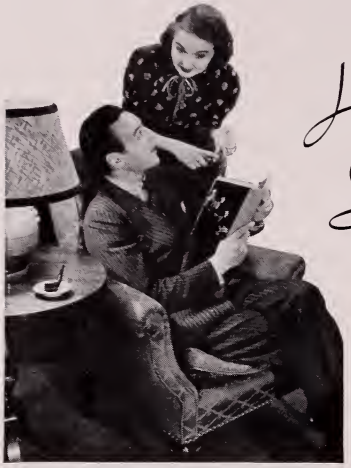
Let's back-track a bit.

You are about to film a scenic. And in this scenic you want the beautiful cloud effects that are largely responsible for your enthusiasm for the subject. You, therefore, will devote two-thirds of your picture area to the sky and clouds. It becomes immediately obvious that there are more light objects in this scene than there are in the ordinary subject. This being the case, and the sky and clouds being your goal, you will want to use one diaphragm stop smaller ($f/11$ instead of $f/8$, for example) than you ordinarily would for average subjects under the same sunny sky. In short, you expose for the sky and let the landscape come as it may. But when you do, you will inevitably lose some of the beauty and detail of the landscape.

What to do?

Just this. Slip a yellow filter over the lens of your camera. The yellow filter will hold back the blue rays from the sky, yet permit the rapid passage of the rays reflected by clouds and foliage. The sky will be gray,

the clouds white—and, as the yellow filter will stop but a few of the light rays reflected from foliage, the landscape will be crisp and clear. Exact instructions for the use of yellow filters cannot, and need not, be given here. They are contained with the filters as sold. But all their use requires is that you open up the lens a bit—make an exposure allowance of a stop or two, just how much depends upon your film and filter.



He: "Still with me?"

She: "Certainly—when we use a yellow filter with our camera we just set the lens marker a stop or two wider than we ordinarily would. Nothing hard about that."

But perhaps you want an even more dramatic reproduction of sky and clouds. You want the sky dark, very dark. You can get this effect by using the yellow filter and stopping down for deliberate underexposure. But once again, you are going to lose detail in the landscape. And here is where a red filter really comes into its own. This filter brings blue rays from the sky up short and will result in snow white clouds against a dark gray sky—yet it will not materially hinder the reproduction of the landscape if you open a stop or two to make up for its light-stopping properties.

Which brings us back to the properties of a scenic as a whole—grass, foliage, trees, sky, clouds, and that intangible quality known as distance. Clouds and sky you know about. Let us take up this matter of distance.

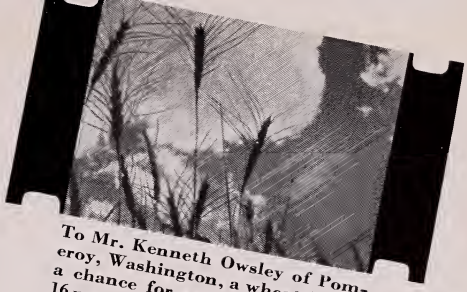
There is, as you know, considerable difference in the distances you can see on sunny days. This same difficulty is experienced by your camera and film. The obstacle, of course, is haze. *Without* a filter your scenics made on hazy days are going to look very much as you see them with your own eyes. *With* a filter, and especially a red filter, your hazy day scenes are going to appear almost as crisp and clear as the scenics you saw on days when there was no visible haze. Haze, you see, scatters blue light from the sky so that the detail of distant ground objects is more or less lost. A

yellow or red filter largely eliminates these blue rays and thereby permits the passage of rays of other colors from objects in and beyond the haze.

Which leaves us but grass, foliage, and trees.

These, too, benefit from the use of a filter. There are, after all, only a limited number of tones of gray between which the human eye can distinguish. A properly exposed unfiltered scene must of necessity reproduce grass, foliage, and trees in closely paralleling tones of gray if there are to be any light tones left for sky and clouds. But the same yellow and red filters which hold back the blues of the sky so that they register in darker tones of gray permit the rapid passage of light rays from light green foliage so that they register with marked contrast against darker green foliage and shadows.

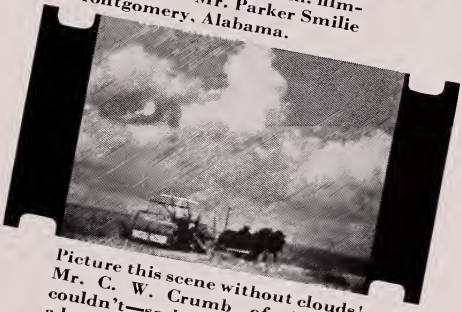
Color filters, to sum up, can be used to decided advantage for almost every outdoor black-and-white shot except close-ups of individuals. Here they should be avoided, because, if used, they will render fast-registering flesh tones in a chalky white. You should always use a filter when making distant shots with a telephoto lens. You should always use a filter for beach scenes, sunsets, airplane shots —either *of* or *from*; landscapes, and mountain shots. And you should always use one when making distant shots with any lens when there is snow on the ground, because, for one thing, there is generally considerable



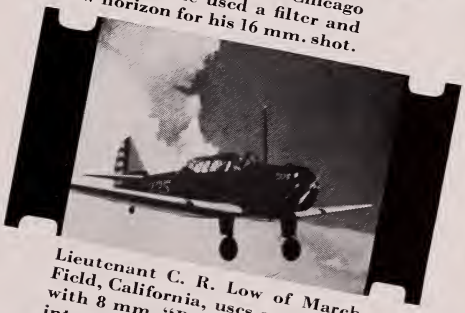
To Mr. Kenneth Owsley of Pomeroy, Washington, a wheat field is a chance for an upward-angled 16 mm. filtered close-up.



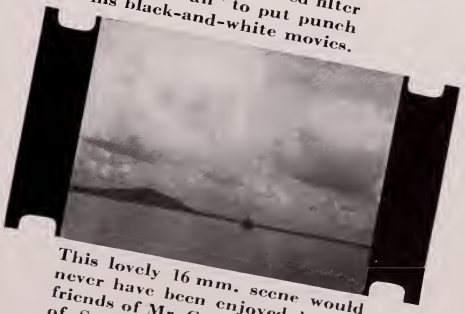
Low camera angle . . . filter for contrast—this is the 8 mm. filming formula of Mr. Parker Smilie of Montgomery, Alabama.



Picture this scene without clouds! Mr. C. W. Crumb of Chicago couldn't—so he used a filter and a low horizon for his 16 mm. shot.



Lieutenant C. R. Low of March Field, California, uses a red filter with 8 mm. "Pan" to put punch into his black-and-white movies.



This lovely 16 mm. scene would never have been enjoyed by the friends of Mr. Carl G. Backstrom of Seattle, Wash., had he not used a filter.

haze during the winter. For another, snow and sky are apt to appear similarly flat and white unless a filter is used to snap out the contrast between clouds, sky, snow, and trees.



He: **"I'm sold! From now on no more black-and-white movies for me without a filter."**

The information which has preceded this paragraph has all been aimed at showing you how you can record scenics so that their black-and-white rendition will closely approximate their effect upon the eye in colors—so that they will look more natural. Yet filters, particularly the red filter, also enable you to achieve some nature faking when it seems desirable. In ordinary usage you would open up a stop or two to compensate for the light-absorbing qualities of a red filter. When you do, you obtain superlatively fine reproduction of sunlit landscapes. But when you do not, the effect you obtain is one of *moonlight.*

There are filters in a great variety of colors. But, for panchromatic films, only two are of real importance—the Yellow and the Red (A) Filter. There are many different types of mounts for filters. But we will confine ourselves here to listing the mounts in which filters should be ordered

Filters complicated? You be the judge. You slip them over your movie camera's lens as easily as this . . .



. . . and then move the aperture marker over a stop or two beyond normal exposure—just how far depends upon film and filter being used.





Bright sun, clear day, lovely view—but no snap. What's wrong with this picture? No filter!



Here's a photographic stumbling block—haze—for which a filter would be a warranted cure.

for Ciné-Kodaks and their lenses. There are two types of these mounts. One is a mount for the standard lens of your camera. The other is a Combination Lens Attachment, which, in most instances, will enable you to use a filter with one or more lenses. The latter consist of an adapter ring which fits onto the lens, a filter retaining ring which fits into the adapter ring, and a filter cell which fits into the retaining ring. The adapter rings are supplied in three series and in a variety of sizes, and should be ordered both by series number *and* diameter size. The retaining rings and filter cells are supplied in but three sizes—Series V, VI, and VII—and will fit adapter rings carrying the same series numbers, regardless of diameter variance in that series.

Check with the tables below and on page 49 to see which single mount fits your camera's standard lens, or which combination attachment, or attachments, will best serve standard lens and accessory lenses. Most standard lenses, please note, will only take the single filter mounts. No attempt will be made here to list the prices of filters. These vary from $1, for a yellow filter in a Z mount, to $4.20 for filter, adapter ring, and retaining

Filter Mounts for Ciné-Kodak Standard Lenses

Camera	*Lens*	*Mount or Series*
Ciné-Kodak Eight, Model 20	*f*/3.5	Z
Ciné-Kodak Eight, Model 25	*f*/2.7	Z
Ciné-Kodak Eight, Model 60	*f*/1.9	Series V $\frac{13}{16}$
Magazine Ciné-Kodak Eight	*f*/1.9	Series V $\frac{15}{16}$
Ciné-Kodak, Model E	*f*/3.5	Z
Ciné-Kodak, Model K	*f*/1.9	W
Magazine Ciné-Kodak	*f*/1.9	W
Ciné-Kodak Special	*f*/1.9	W



FILTER MOUNTS FOR CINÉ-KODAK ACCESSORY LENSES

Lenses	*Cameras*	*Mounts or Series*
25 mm. (1 inch) *f*/1.9	For Magazine Ciné-Kodak Eight....	W
38 mm. (1½ inch) *f*/4.5	For Ciné-Kodak Eight, Model 60....	Series V $\frac{13}{16}$
38 mm. (1½ inch) *f*/2.5	For Magazine Ciné-Kodak Eight....	Series V*
50 mm. (2 inch) *f*/1.6	For Magazine Ciné-Kodak Eight, Ciné-Kodak K, Magazine Ciné-Kodak 16 mm., and Ciné-Kodak Special.....	Series VI*
63 mm. (2½ inch) *f*/2.7	For Magazine Ciné-Kodak Eight, Ciné-Kodak K, Magazine Ciné-Kodak 16 mm., and Ciné-Kodak Special.....	Series VI 1 $\frac{5}{16}$
76 mm. (3 inch) *f*/4.5	For Magazine Ciné-Kodak Eight, Ciné-Kodak K, Magazine Ciné-Kodak 16 mm., and Ciné-Kodak Special.....	Series V 1 $\frac{1}{16}$
102 mm. (4 inch) *f*/2.7	For Magazine Ciné-Kodak 16 mm., Ciné-Kodak Special, and Ciné-Kodak K.....	Series VII 1 $\frac{13}{16}$
114 mm. (4½ inch) *f*/4.5	For Ciné-Kodak K, Magazine Ciné-Kodak 16 mm., and Ciné-Kodak Special.....	Series VI 1 $\frac{5}{16}$
152 mm. (6 inch) *f*/4.5	For Ciné-Kodak K, Magazine Ciné-Kodak 16 mm., and Ciné-Kodak Special.....	Series VI 1 $\frac{9}{16}$
15 mm. Wide Angle	For Ciné-Kodak K, Magazine Ciné-Kodak 16 mm., and Ciné-Kodak Special.....	Series VI 1 $\frac{9}{16}$

*No Adapter Ring required

ring in a Series VII Combination Lens Attachment.

The use of Kodachrome filters is covered in the chapter devoted to Kodachrome Film. Filters for black-and-white film should never be used with Kodachrome Film.

LENSES

THE matter of lenses has been touched upon in a preceding chapter on the exposure and focusing aspects of lens use. But this department has to do with the use of lenses—particularly accessory lenses.

If your camera is fixed-focus, you needn't worry about the comparative

virtues of lenses of different focal lengths because your camera can very likely only take that one lens—and probably a portrait attachment permitting extreme close-ups. But if your camera's lens is interchangeable with others of shorter or longer focal length, this chapter should really come under the head of required reading.

Lenses are named for their largest diaphragm stops. All Ciné-Kodak lenses have *f*/16 or *f*/22 as their smallest opening, and range from these diaphragm stops to *f*/4.5, *f*/3.5, *f*/2.7, *f*/2.5, *f*/1.9, or *f*/1.6—and are known as *f*/4.5, *f*/3.5, *f*/2.7, *f*/2.5, *f*/1.9, or *f*/1.6 lenses. Stop for stop, lenses are as efficient from their largest to their smallest openings as lenses with larger maximum openings. For example, an *f*/3.5 lens is every bit as efficient from *f*/3.5 to *f*/16 as an *f*/1.9 lens—the advantage of the latter lens being that it enables you to make movies from *f*/3.5 to *f*/1.9 under light conditions beyond the range of the slower *f*/3.5 lens.

There are seven Ciné-Kodak accessory lenses for 16 mm. cameras with the interchangeable lens feature—a wide angle lens and six telephotos. Three of these telephotos (50 mm., 63 mm., and 76 mm.), plus the standard "Sixteen" 25 mm. *f*/1.9 lens, are also available for the Magazine Ciné-Kodak Eight—and, in addition, a 38 mm. *f*/2.5 lens.

There is but one accessory lens supplied for roll-film-loading Ciné-Kodaks Eight—the 38 mm. (1½ inch) *f*/4.5 telephoto for Ciné-Kodak Eight, Model 60.

Most beginners at movie making firmly believe that the sole virtue of a telephoto lens is to make big ones out of little distant ones, as is frequently manifested in professionally-made big game pictures when the hero, or heroine, can apparently reach out in front of the camera's lens and chuck a dozing lion under the chin.

Which most certainly is an advantage of telephotos. But there are others just as important, though not as frequently appreciated.

First, let us briefly discuss the characteristics of a telephoto lens. And for our subject, let us take the newest and most versatile telephoto lens set-up available—the Ciné-Kodak accessory lenses.

The Ciné-Kodak telephotos

There are five long-focus, or telephoto, lenses for Magazine Ciné-Kodak Eight: 25 mm. (1 inch) *f*/1.9, 38 mm. (1½ inch) *f*/2.5, 50 mm. (2 inch) *f*/1.6, 63 mm. (2½ inch) *f*/2.7, and 76 mm. (3 inch) *f*/4.5. The last three are also supplied for 16 mm. Ciné-Kodaks with the interchangeable lens feature, and, in addition, the 102 mm. (4 inch) *f*/2.7, 114 mm. (4½ inch) *f*/4.5, 152 mm. (6 inch) *f*/4.5 lenses. There is a very good reason why the



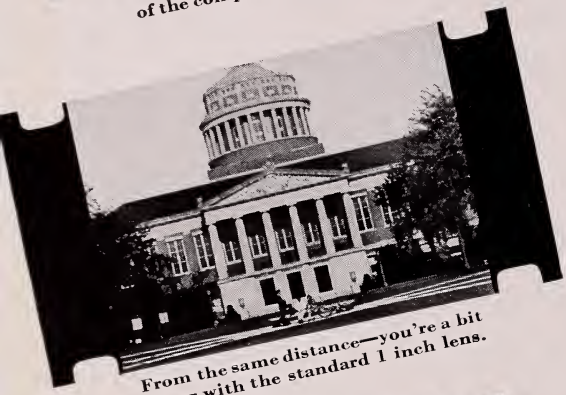
The lens set-up for 16 mm. Ciné-Kodaks. The telephotos, from left to right: 152 mm. (6 inch) *f*/4.5, 50 mm. (2 inch) *f*/1.6, 102 mm. (4 inch) *f*/2.7, 114 mm. (4½ inch) *f*/4.5, 63 mm. (2½ inch) *f*/2.7, and 76 mm. (3 inch) *f*/4.5 lenses. Up front are protective lens caps—and the 15 mm. *f*/2.7 wide-angle lens, 25 mm. (1 inch) *f*/1.9 lens, and a lens adapter. The Magazine Ciné-Kodak Eight takes the 1, 2, 2½ and 3 inch lenses—and, in addition, a 13 mm. *f*/1.9 lens and 38 mm. (1½ inch) *f*/2.5 lens.

greatest focal length lens supplied for an Eight is the 76 mm. lens. This lens, on an "Eight," is the equivalent of a 152 mm. lens on a "Sixteen" —the aperture on an "Eight" being only about half as wide as that on a "Sixteen" camera. While lenses of greater focal lengths *could* be used on an "Eight," they are seldom needed and steady results with them are extremely difficult, as will be explained later in this chapter.

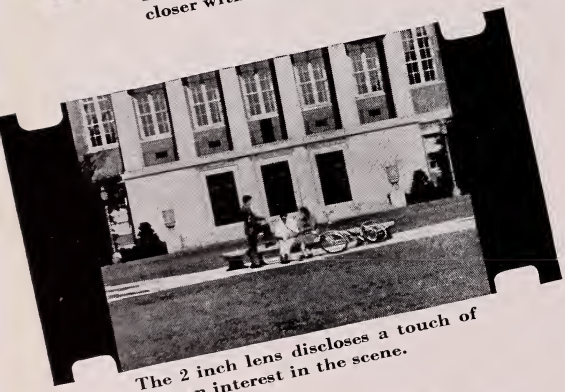
Taking as normal images made with the standard 13 mm. (½ inch) lenses for "Eights" and the 25 mm. (1 inch) lenses for "Sixteens," telephotos magnify images in direct ratio to their focal length. For example, the field of view of a standard 1-inch lens might include a bit of shore-line, sky, a house on a point a quarter of a mile distant, and an indistinguishable figure on the steps of that house. As reproduced by the standard lens and



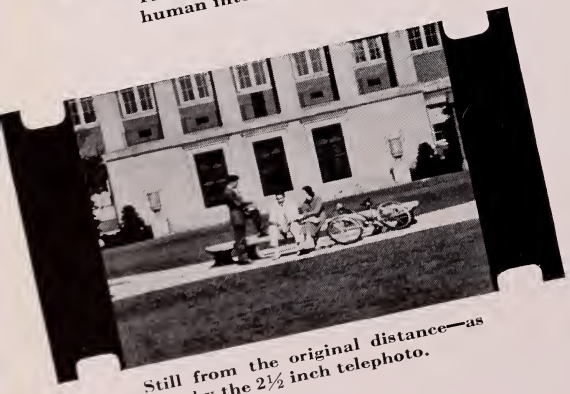
The wide-angle lens brings a glimpse of the complete building.



From the same distance—you're a bit closer with the standard 1 inch lens.



The 2 inch lens discloses a touch of human interest in the scene.



Still from the original distance—as seen by the 2½ inch telephoto.

projected on your screen the house might be but 2 inches in height and the figure a scant half inch. If you film the same subject from the same position with the 2 inch lens, the house and figure will be just *twice* as high on your film, and therefore, on your screen; with the 2½ inch lens, *two and a half* times as high; with the 3 inch lens, *three* times as high; with the 4 inch lens, *four* times as high; with the 4½ inch lens, *four and a half* times as high; with the 6 inch lens, *six* times as high. Hence, with the last lens, your screen image of the house would be a full foot high and the erstwhile unidentifiable half-inch figure would become easily recognizable in its magnified proportions.

Obviously, however, as you increase the focal length of your lens and the size of the most vital part of your field of view, you inversely narrow the field. The 2 inch lens would show half the height and width of the area covered by the 1 inch lens, or, in other words, less of the shoreline and sky, more of the point and the house upon it. The 4 inch lens might only reproduce the immediate area of the distant house and the figure. And the 6 inch lens would show nothing more than the lawn, the house, a bit of water in front of it, sky above it, and focus your attention on the waving figure.

This is the most popular use of telephoto lenses—to span the distance and uninterestingness of foreground so as to heighten the size and interest of some remote subject. The applica-

tion of long focus lenses to this subject is, as you have seen, quite simple. Crystallize it in your mind by comparing it with firearms. If you're shooting ducks a few rods in front of your gun, and you want to bag as much game in one shot as possible, you use a shot gun.

That's your 1 inch lens.

If your target is a distant deer which you are unable to approach, you therefore use another type of gun —a high powered rifle.

That's your telephoto lens.

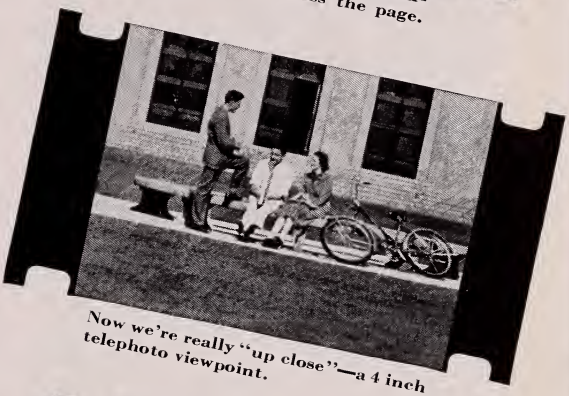
And this firearms simile immediately brings us to another important point.

Tripod for telephotos

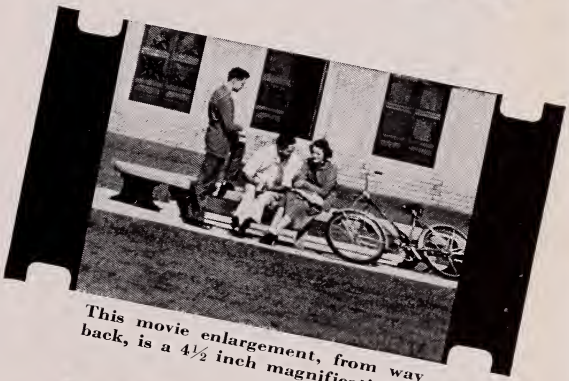
With a shot gun you can blaze away into the middle of a nearby flock of ducks and drop a few of them no matter how much wobble there may be in your hands. But use this same technic when hunting distant deer with a rifle and you'll never get any antlers for your fireplace. The effect of the wobble increases together with the distance of your target. Therefore, although home movie cameras are essentially hand-held machines, you should always operate your camera from some steady support when using a lens of long focal length. The 2½ inch lens is the maximum for a camera held in your hands, and even shots made with this lens will be immeasurably improved by the use of a tripod. Many movie makers, in fact, use a tripod for almost all their shots, no matter what lens is on their camera.



As glimpsed by the 3 inch lens. Compare with the view across the page.



Now we're really "up close"—a 4 inch telephoto viewpoint.



This movie enlargement, from way back, is a 4½ inch magnification.



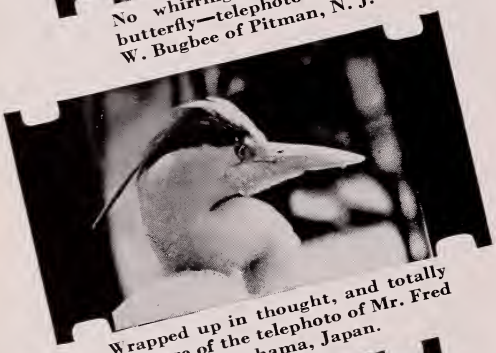
Right on top of the unsuspecting trio with a 6 inch telephoto.



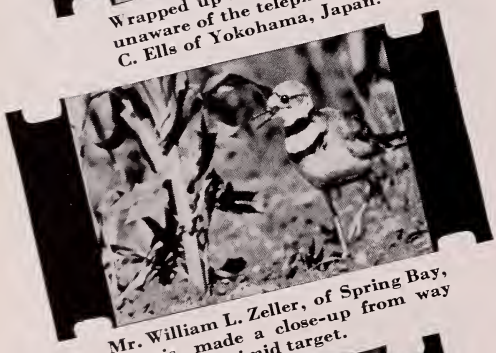
Mr. Clifford B. Paul of Moline, Illinois, made this graceful telephoto shot.



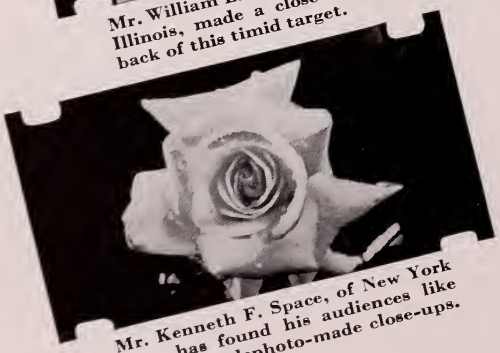
No whirring camera startled this butterfly—telephotoed by Mr. Ripley W. Bugbee of Pitman, N. J.



Wrapped up in thought, and totally unaware of the telephoto of Mr. Fred C. Ells of Yokohama, Japan.



Mr. William L. Zeller, of Spring Bay, Illinois, made a close-up from way back of this timid target.



Mr. Kenneth F. Space, of New York City, has found his audiences like flowers in telephoto-made close-ups.

They do so not because of any desire to impress onlookers with their cinematographic professionalism, but because they know that rock-steady screen results are far more pleasing than those suggesting that the cameraman has fallen victim to an advanced case of St. Vitus dance.

And this is especially true of panoraming — a filming desire to which we are all susceptible. Panoram (if you must) *rarely and slowly* with a standard lens. But *never* with a telephoto lens. For if distant objects are moving across your screen at a rate of ten feet a second with a 1 inch lens, they'll go whizzing by at a sixty-foot-per-second clip if you panoram when your camera is fitted with a 6 inch telephoto. Add to this the pronounced jumpiness of a camera held in unsteady hands—and you have a screen effect guaranteed to create the jimjams in the most sympathetic movie audience.

So if you go in for telephoto filming —and there are many more reasons why you'll want to—by all means get a tripod. Don't think of it as a ponderous device. Some are. But the newer ones, made especially for your use, are eminently practical and easy to use or carry. The Ciné-Kodak Tripod, for example, weighs but 6½ pounds, yet contains every necessary adjustment for smooth, steady operation throughout a complete horizontal and vertical operating range.

But now for a little used, yet ex-

tremely important feature of telephotos — the magnification of small objects near the camera. For a telephoto has more advantages than merely serving as a cinematic seven league boot.

Flowers, insects, birds—small machine parts, if this is your filming bent —these and many other nearby minute objects will be far more interesting if they are made to fill the screen by means of magnification with a telephoto.

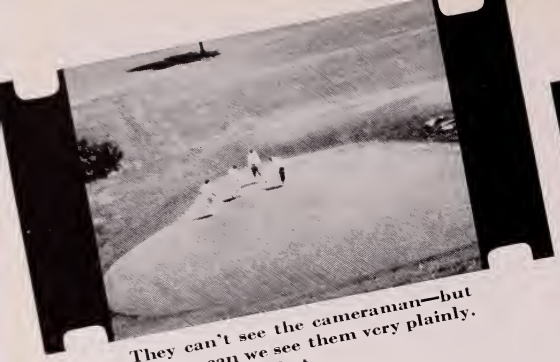
She: "Now there's an idea! It never occurred to me that you'd want to use a telephoto lens for anything but wild game. But now we can get some perfectly stunning close-ups of our flowers."



The minimum working distances indicated on the focusing scales of Ciné-Kodak telephotos, and the widths of the areas the six 16 mm. lenses cover at these distances are as follows: the 2 inch lens at 2¼ feet—4½ inches; the 2½ inch lens at 1½ feet—2⅛ inches; the 3 inch lens at 3¾ feet—4¾ inches; the 4 inch lens at 4½ feet—4½ inches; the 4½ inch lens at 4¼ feet—3½ inches; and the 6 inch lens at 10 feet—6¾ inches.

The minimum focusing distance of the 1½ inch 8 mm. telephoto for Ciné-Kodak Eight, Model 60, is 6 feet—and at this distance an area 8⅛ inches in width is covered. The several lenses available for the Magazine Ciné-Kodak Eight cover similarly small areas. There are field size tables on pages 205 and 206 which encompass both 8 mm. and 16 mm. lenses.

But this does not mean that close-ups cannot be made with fixed-focus cameras such as Ciné-Kodaks Eight, Models 20 and 25, or the 16 mm. Ciné-Kodak E, *f*/3.5. At 5 feet with the Model 20, for example, you cover a field about 1¾ feet wide. But when a Ciné-Kodak Portrait Attachment is used you can film as close as 1¾ feet and cover an area but 7 inches in width. Similar magnification is possible with the Model 25 and the Model E when the Portrait Attachment is used.



They can't see the cameraman—but neither can we see them very plainly. A 1 inch lens shot.



The 6 inch telephoto brings us to the edge of the green—yet the cameraman hasn't moved an inch.

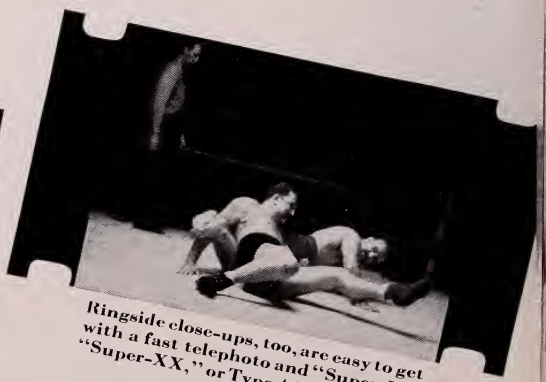
And now for still further advantages of telephotos.

Naturalness . . . lack of conscious pose . . . this is essential to screen interest. A telephoto lens is often the medium through which lifelike scenes can be obtained. Your youngster, for example, may evidence tenseness when aware of the attentions of your movie camera. By means of the telephoto you can obtain close-up views without the child's knowledge. Perhaps an important golf match is your target. A telephoto enables you to keep your distance, yet get your close-ups. This use of a telephoto is also immensely important when you make travel movies, the essence of which consists of interesting close-ups of local citizens in their native garb. A standard 16 mm. 1 inch lens would cover a field of about $3\frac{3}{4}$ x 3 feet from a distance of 10 feet. But poke your camera under a subject's nose and he will generally freeze into a static semblance of his usual self, or just up and leave you flat. With a telephoto you can remain at a safe and unnoticed distance, yet on your screen the unsuspecting victims will appear to be but a few feet distant from your camera. You can keep 20 feet distant with a 2 inch lens, 25 feet with a $2\frac{1}{2}$ inch, 30 feet with a 3 inch, 40 feet with a 4 inch, 45 feet with a $4\frac{1}{2}$ inch, and 60 feet with a 6 inch lens—and yet cover the same close-up field you'd get when 10 feet distant with the 1 inch lens.

Still another advantage—backgrounds. Let it be supposed that your subject is a group on the veranda of a mountain inn, beyond which lies a



The new, fast, telephotos make possible black-and-white or full-color close-ups of subjects like this.



Ringside close-ups, too, are easy to get with a fast telephoto and "Super-X," "Super-XX," or Type A Kodachrome.



Mr. Ralph E. Gray of Mexico City was twice as far from this girl as you'd think—made with a 2 inch lens.



Not a toot was missed because Mr. Gray kept his distance by means of a telephoto—yet we're up close.

series of majestic peaks. As filmed with the 1 inch lens the mountains in the background are far more flattened, far less impressive, than they would be if you backed up a few feet with a telephoto lens so as to obtain sufficient lens "spread" to include your group on the veranda, and thereby "pull in" the distant peaks to new aspects of nearness and majesty.

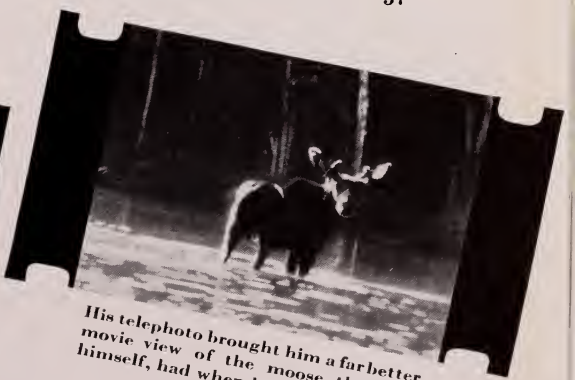
And still another—perspective. Rivers, long lakes, streets, country roads, tall buildings—you know how they look when filmed with an ordinary lens. Their converging lines enter from either side of the picture to meet almost obtusely in the center, looking not at all as they would to the eye. Yet when a 3 or 4 inch lens is used, a road would be reproduced as a gradually tapering ribbon instead of an unnatural, upward pointing triangle on the screen.

Three of the six 16 mm. telephoto lenses listed in this chapter have the added advantage of being unusually "fast"—a feature of real interest to both indoor and outdoor sportsmen. These are the 2 inch $f/1.6$ lens, and the $2\frac{1}{2}$ inch and 4 inch $f/2.7$ lenses—the first two, incidentally, being of sufficiently short focal length to be used on hand-held cameras. The wide apertures of these lenses fit them to make good indoor movies of well-lighted athletic events, as well as outdoor movies in poor light.

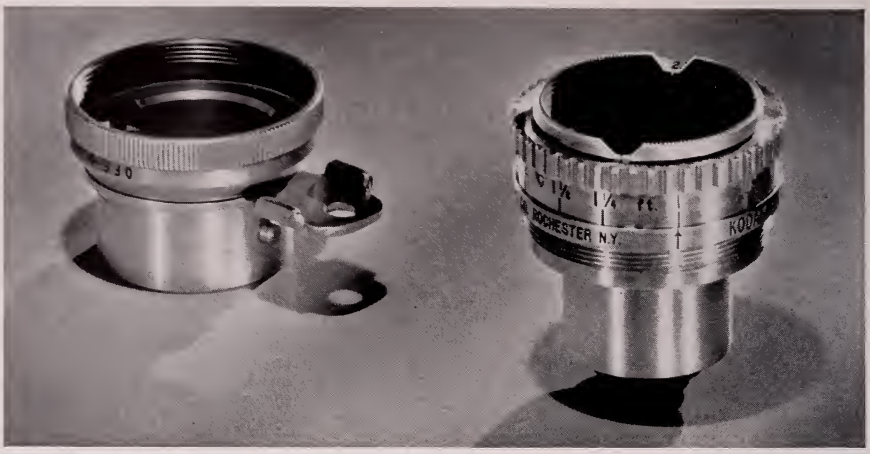
Nor are these all of the advantages of telephoto filming—but they are sufficient to show you that a long-focus lens or two would be a wise investment for the movie maker who wants the best possible reproduction of



Mr. Ormal I. Sprungman, of Minneapolis, Minn., was up with the sun to make this telephoto shot.



His telephoto brought him a far better movie view of the moose than he, himself, had when he filmed it.



Here is the truly versatile 15 mm. *f*/2.7 focusing wide-angle lens (right) and its adapter for the 16 mm. Magazine Ciné-Kodak. Other adapters fit this lens to other 16 mm. cameras.

many important subjects for everyday shots at home, and movies abroad.

And lastly—the wide-angle lens.

WIDE-ANGLE LENS

Perhaps the most useful accessory lens available for most 16 mm. Ciné-Kodaks is the 15 mm. *f*/2.7 focusing wide-angle lens—"fast" enough for use indoors as well as outdoors.

As its name implies, the purpose of the wide-angle lens is to include more in the picture area than is possible with a standard lens at the same distance from the subject. Naturally, with a wide-angle lens, every object will be smaller than it would be if reproduced by the standard lens.

The standard *f*/1.9 lens of a 16 mm. Ciné-Kodak has a focal length of 25 mm., which, at a camera distance of 10 feet, for example, covers the previously mentioned field of about $3\frac{3}{4}$ x 3 feet. This is a relatively wide-angled field of view. Yet often—particularly indoors—you want to include a larger field. You can't back up with the camera because of the



The dotted line shows the area which would be covered by a standard 1 inch lens used at the same distance from which this wide-angle lens shot was made.

confines of the room. You can panoram—but that's bad. What you gain at the right you lose at the left.

A fast lens with a wide-angled view is the ideal solution—and the 15 mm. *f*/2.7 focusing wide-angle lens is the ideal lens. With it, at 10 feet, your field is about 6 by 4½ feet.

Consider its advantages out of doors, too.

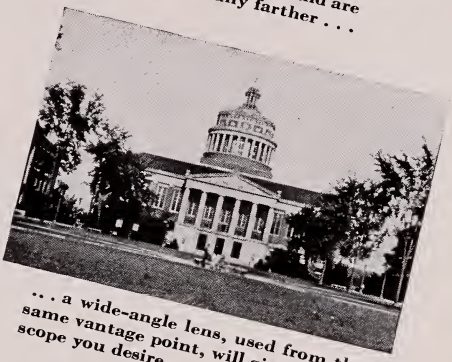
Perhaps you are making a vacation movie . . . you want to film an imposing building in one rock-steady shot. Although you've retreated as far as you can with your camera—perhaps a hundred feet—you are getting a span of only about 37 feet with the standard *f*/1.9 lens. Experienced movie makers use a wide-angle lens as a substitute for panoraming—for the wide-angle lens will almost double that 37 foot coverage—62 feet, to be exact.

Or perhaps your travels take you to crowded tropical native quarters, or narrow Old World streets. Twenty-five feet is the maximum camera distance you can achieve for an across-the-street shot. That will give you only about a 9½ foot field width with the standard 25 mm. *f*/1.9 lens. A wide-angle lens steps up your coverage to 15½ feet. Or, if you elect to use it for a down-the-street shot, the wide-angle lens will emphasize the street's narrowness, show more of nearby buildings.

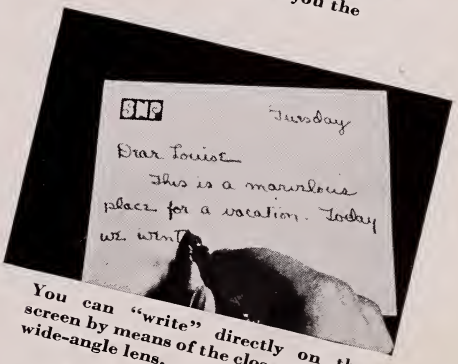
Yet the advantages of this new lens are no less useful for making extreme close-ups—for it focuses down to 6



When you want all of a building to show in one rock-steady shot, and are unable to "back up" any farther . . .



. . . a wide-angle lens, used from the same vantage point, will give you the scope you desire.



You can "write" directly on the screen by means of the close-focusing wide-angle lens.



This dual-purpose lens also makes possible extreme close-ups such as this.


VACATION 2
VACATION 1

inches, with a field of about 3⅓ by 2½ inches.

Consider the many applications of such close focusing.

A single blossom can be made to fill the entire screen. You can make unusual titles of a hand writing a letter or vacation postcard. Watch faces, automobile speedometers—all of the innumerable close-ups that aid continuity—can readily be filmed.

And this concludes our preliminary chapters.

Let's make movies!

CONTINUITY



CONTINUITY, in a word, is the chief ingredient of the successful home movie. Between its first and last scenes every movie should tell a complete and interesting story.

It should not record a succession of *shots* of different subjects, but rather a

succession of *sequences* of different subjects—the length of the sequences being dependent upon the importance of the subjects.

And, if it boasts of nothing else, a movie should be as free as possible from posing. For, although the days of the elbow bracer and headrest have gone never to return, their heritage lingers on. To some extent it has been perpetuated by the mistaken photographic technic of "Just a moment, Aunt Lucille. Kindly step over in front of that hydrangea bush . . . a little farther over . . . there, that's great. Now smile . . . wider . . . wider, fine! Hold . . . HOLD IT . . . good. Now Wilbur, it's your turn. Give Horace the lollipop to hold. Oh, all right, all right—if you're going to cry about it."

Fiendish, you'll agree. And so unnecessary. For certainly no photographic biographer of Aunt Lucille would want her to go down in history as the lady who showed her teeth in front of a hydrangea bush. She is probably a most delightful individual who spends her few idle hours in a rocking chair with her needlework in her lap and a kitten playing about her feet. This is just the way she should be filmed plus a close-up or two to show her flying fingers and the kitten busily batting the ball of yarn about.

To put it another way: If you wanted to compile a movie record of wild life, and found that your income tax payments had so heavily eaten into your budget that you couldn't quite swing a trip to Africa, would you take your Ciné-Kodak to a museum of natural history? Or to the zoo? Even granting that both domestic and imported faunae at the former, due to the labors of the curators and taxidermists, have been posed in the most lifelike of attitudes, they are not movie subjects.

Which conveys our point—the problem of posing simply does not exist for the reason that you *don't want* your subjects to pose for movies. The heritage of the headrest suggests that your subjects face the camera with their best "I regret that I have but one life to give" manner. But your movie camera, which exists to preserve life and not to destroy it, would far prefer that they merely go about their business of sailing a boat, teaching the old dog new tricks, or stoking up their favorite briar, while you record their activities in movies. And all that is vitally necessary to accomplish this is to keep in mind that your camera uses *movie film* which, although it takes but one scene at a time, *shows them consecutively.*

Continuity essential to good movies

No outstanding amateur movie film ever happened by accident. Some forethought was inevitably lavished upon it—and the chances are that the forethought was intimately concerned with this business of continuity.

For some movie subjects, such as vacation trips, the continuity is ready made—the from-here-to-there theme. For others you must search for a theme upon which to thread the movie scenes you plan to make. And it is often possible to improve the movies you've already made by rearranging them upon some central theme and then, perhaps, by making a few additional shots to further continuity. For continuity in movies is not unlike that in a long distance 'phone call. If one word or phrase is carelessly pronounced, and therefore lost upon your listener, so may likewise be the succeeding phrase as your listener's mind tries to catch up with the theme.

But let's see what this thing called continuity will do for one of your favorite camera targets. You can pick your own subject for the initial demonstration.

She: "There are Billy and his dog out on the lawn now. How about them?"

He: "Fine. I'll get the movie camera—you bring along this book, and we'll see how much there is to continuity."



Billy and the pup it is!

The obvious thing to do is to just waltz outdoors and film them playing together. If you stand ten feet away from them and make the movie, you, and your movie audiences, can see them playing whenever you desire—just as though you were but ten feet away from them on the lawn.

But such a shot alone does not make a movie. What you really want is a *sequence* of shots which will be a movie of the game they're play-



This little sequence of movie enlargements tells the story of a boy and his dog far better than just one or two shots made from the same vantage point.

ing—even, as is now the case—when Billy is merely throwing a ball for the pup to retrieve.

How's this?

The pup brings the ball to Billy and drops it at his feet, then tries to grab it as Billy reaches for it.

A close-up of Billy's hand wresting the ball from the pup.

A head-on shot of Billy throwing the ball.

A shot from around the corner of the house as the ball appears with the pup one jump behind it.

Another shot from behind Billy as the pup comes trotting proudly back.

A head-on close-up as Billy delightedly hugs his dog.

Nothing much to it, yet it has continuity and it's a movie! If all of the subjects which serve as grist for your movie mill are treated in this same easy fashion—are filmed in a series of simple sequences—you'll find your reels far smoother, and a whale of a lot more interesting.

The little sequence just given for Billy and his playmate is elementary. When you've learned to film all subjects with this technic, you may want to do Billy and his pup proud and make a real little movie of them—one which will be a lot of fun to put together and which will really delight every one who is privileged to see it.

Now let's see. What does Billy do the first thing when he goes outdoors? He calls his dog, doesn't he? And then the two of them go adventuring, perhaps meet up with some other boy or a very big dog—at which point Billy's pup, if he has any sense, will light out for home. Billy, of course, will be disgusted with his canine companion, so—when dinner-time comes and the pup begs for a few morsels from his master, he receives nothing but a chilling glance. But Billy relents and feeds him—*nope, here's a better idea*—he *doesn't* relent at dinner-time. Then, when Billy has gone to bed, the heartbroken pup noses his way through a door or two, sneaks upstairs, and jumps up on the foot of Billy's bed. The son and heir, by then half asleep, opens his eyes, frowns at the pup for a moment, and then smiles, reaches down and rubs his ears. Finale? Both of them asleep.

And on the next page there's an outline to follow in making the movie, showing the order and type of shots by which such a simple and interesting little reel might be filmed. You could make it just as well with only a mental outline. But, as there are several points to be made at the conclusion, the outline is broken up into individual scenes and distances are given for each scene: c.u. for close-up, s.c.u. for semi-close-up, m.s. for medium shot, and d.s. for distant shot.



She: "This scenario idea is getting a bit ambitious, isn't it?"

He: "Don't get scared. Sounds like a lot of fun to me."

To answer the first objection—you'll probably find that this little movie, once you study it, is composed of *just the type of shots you would ordinarily make of Billy and his dog.* The difference is that, in this continuity, the shots are arranged for best effect. If you tried to make them in the order in which they are given, this movie would be a bit ambitious to undertake—but this is not necessary. In fact, you need not even make them on the same day. Take them whenever it's convenient, and put them together with a splicer

—which is a topic thoroughly covered in a later chapter. As to footage, let's see . . . there are slightly more than thirty different scenes in our movie —and that means a bit more than one roll of Ciné-Kodak Eight Film or one 100-foot roll of 16 mm. film. You probably burn up as much film as that for Billy every month *without* continuity—or don't you?



The Prodigal Pup

1. m.s. The front door opens, Billy comes out, looks around, calls his dog.
2. c.u. Billy calling.
3. c.u. The pup lying on the ground asleep on the other side of the house. At Billy's call he suddenly awakes, pricks up his ears, and rushes off.
4. m.s. Billy leaving the porch, still calling. The pup, to their mutual delight, dashes around the corner of the house and leaps upon him.
5. s.c.u. The two seated on the porch steps.
6. s.c.u. A shot from behind them as Billy jumps to his feet and the two set off down the street.
7. m.s. The two approach the camera, suddenly look off to one side, and stop.
8. m.s. A large and formidable looking dog approaches the camera.
9. s.c.u. Billy backs away from, and the pup barks at, the larger dog—which does not appear in the picture.
10. s.c.u. The larger dog comes even nearer.
11. s.c.u. Billy, still backing up, encourages his pup to attack the larger dog—which again is not in the picture.
12. c.u. The larger dog is by now almost on top of the camera.
13. s.c.u. Billy, facing the camera, turns and runs. The pup takes after him.

14. d.s. A view from the house as the pup comes galloping homewards with Billy only a few jumps behind.
15. c.u. The pup scratches on the back door, which is opened by an unseen hand, and in he goes.
16. s.c.u. Billy, filmed as he passes the camera, likewise rushes up to the back door and enters.
17. s.c.u. At the dinner table, Billy tells his mother about the pup's cowardly retreat, and points disgustedly towards the floor.
18. c.u. Filmed from above, the pup looks mournfully upwards.
19. c.u. Filmed from the floor level, Billy looks disdainfully away.
20. c.u. A shot from above as the pup puts his paws on Billy's lap and begs for forgiveness. Billy's hand thrusts him away.
21. s.c.u. Billy, through with his meal, gets down from his chair, fixes the pup with a haughty stare, and stalks from the room.
22. c.u. The pup, nose on paws, looks appropriately repentant.
23. s.c.u. Billy is tucked into bed, and Mother kisses him goodnight, then dims the light.
24. s.c.u. The pup noses his way through the door from the living room.
25. c.u. Billy asleep.
26. s.c.u. The pup creeping upstairs.
27. s.c.u. From inside Billy's room as the pup peers around the doorway, then enters the room.
28. c.u. Billy, asleep, turns over in bed.
29. c.u. The pup *backs* from the room, then, after a moment, reappears.
30. c.u. Billy sound asleep.
31. s.c.u. The pup enters the room and approaches Billy's bed.
32. s.c.u. From across Billy's bed as the pup leaps upon it and snuggles down alongside his master.
33. c.u. The pup licks Billy's hand.
34. c.u. Billy sleepily opens his eyes, looks toward the pup.
35. c.u. Billy's hand rubs the pup's ears. Fade out.

And there is a mighty interesting little movie, don't you think?



That backing-up shot is a cinch. You'll find it fully described in a paragraph entitled "Upside Down Filming" in the Trick Shots department of this book—you simply film it with the camera inverted, and then turn the scene around in the reel.

But to get back to that first objection—difficulty. Why not just make shots 1 to 16 now? And then, tomorrow or day after, get Billy into the same clothing, and make those few dinner table shots. The bedtime scenes are a third series, also to be filmed at your convenience—there's no reason why you must take movies in the same order in which you show them.

The difficult shots made easy

And now let's look over some of the individual scenes: No. 3, of the pup asleep, then awakening and dashing off—merely wait until a day when you see the pup asleep on the lawn, and then make the shot, even if all the other scenes on the film in the camera are entirely unrelated to your story of the Prodigal Pup. Nos. 8, 10, and 12—of the attacking dog—would indeed be a problem if you actually had to encourage the dog to attack Billy and his pup. But you don't. Perhaps one of your friends has a large and rather fierce dog which he keeps behind a wire or wooden fence. If so, poke your camera's lens through the fence for an unobstructed view and make one continuous shot as the dog charges the camera. Such a shot, when cut into three pieces, will serve for the three scenes. And, for that matter, any large dog in your neighborhood will fill the bill if he habitually runs to bark at strangers. For Scene 14 you need only call Billy's pup when he is outside the house with his master, and, if Billy responds to the call, too, the pup will run ahead of him. Scene 15 is equally simple: Have Billy call coaxingly to the pup from the kitchen, and the pup will supply the action desired. Scenes 18 and 22 can be made at any meal time by simply commanding the pup to lie down when the chief thought in his mind is to sit up and beg for food. Scene 23 requires that you use ample light for the first part (see instructions for indoor movie making farther along in this book) and then dim but a small part of it when "Mother" turns out the room light. The peering stage of shot 27 can easily be obtained by having some one, beyond the doorway, hold the pup by his hind legs for a moment—and shot 29 you already know about. Which leaves but two more bits—the pup licking Billy's hand in Scene 33 and the fade-out of Scene 35. A little syrup on the back of Billy's hand will turn the trick in 33, and if you slide a bit of cardboard or a magazine in front of the light, you'll get the fade-out you want for 35.

Not so hard to make after all, is it?

She: "Why, this movie idea is easy —now that we know how. Let's start it right away."

He: "It's a go! You operate the camera and I'll be the animal trainer."



Before we take up the next subject in our few examples of movie continuity, let one point be made clear. We don't for a moment intend to suggest that you should make a movie, such as the one just outlined, of *every* subject at which you point your camera. A sunset, a litter of playful puppies, a stately yacht, a fire, a graceful swan, some lovely blossoms, chance visits of friends—movie opportunities like these are all deserving of a few feet of film even though they will of necessity result in your collecting a series of disconnected shots. These should be regarded as "record" movies, and be carefully preserved as such. And you may well discover, months or years later, that these individual scenes may be used to advantage in some more pretentious film story you have undertaken. Yet even subjects such as these can, and should, be given continuity. You can do it this way.

Perhaps your camera target is a lovely waterfall. First, make a long range shot of your waterfall. Then one made somewhat closer with perhaps some member of your party clambering over rocks below the falls. Then a close-up of the tumbling torrent at the pool. And then—after other shots the spectacle suggests—another distant shot that your audience



Even when you make movies of friends, your pictures will be more enjoyable if you film with continuity, as illustrated in the movie enlargements at the left.

will quickly recognize as the conclusion of the sequence. This last shot, in fact, might well be half of the unusually extended shot with which you launched the sequence. It completes the circuit—prepares your screen onlookers for the succeeding sequence.

A good share of every movie maker's library is rightly devoted to friends. Yet so many shots of friends show them in stilted poses. Far more interesting than these are movies showing them lighting cigarettes, throwing a beach ball, playing golf, gathered around your dinner table, playing ping-pong, or sharing your picnic fun. And not just individual shots, mind you—but sequences. That's the elementary idea, just as it was applied first to Billy and his pup.

Perhaps one of your friends is an inveterate pipe smoker—any single shot you make of him would inevitably show him puffing on a pipe.

But you don't want *single* shots of subjects, for single shots don't make movies.

Film him in a little sequence. First, his hands, only, filling the pipe bowl . . . pressing down the tobacco with his thumb . . . striking a match and sucking the flame into the pipe . . . the first puffs of smoke being blown past the lighted tobacco—and then, for the first time, your friend puffing luxuriously. The preliminary

shots should be brief—only a very few seconds in length. The last shot a good ten seconds. That's a sequence. That's a *movie*.

Many of your friends will quite likely warrant more than a few shots. For them you merely amplify the theme—just as was done in the longer outline for Billy. What are their hobbies? Does *she* dote on flower gardens? Then build your little movie around that idea—giving you a chance to include some grand Kodachrome shots of blossoms. Does *he* eat, breathe, and sleep golf . . . or fishing . . . or sailing . . . or ship modeling? Then there's your cue! Everyone has a hobby or two. And every hobby is interesting. Blend shots of your friend with shots of his hobby and you'll have a movie story you will like, he will like, and your every screen audience will like.

He: **"S-a-y—this hobby idea does make sense! Jim Cochrane has been after me to make some shots of his golf game so he can see where his slice comes from. I'll please him, get some fine golf movies, and a darn good record of Jim."**

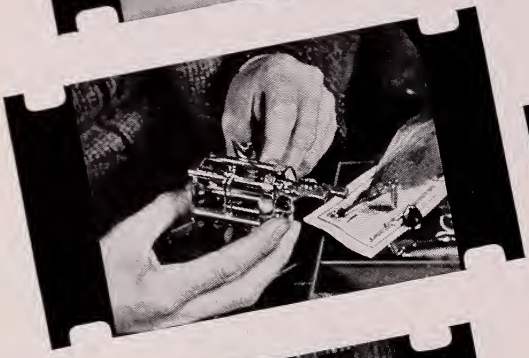


Telling the vacation story

Here, your continuity is ready-made. Yet most movie makers all too often overlook an essential part of every vacation movie. The eagerness with which you anticipated the event, the routes you carefully traced on road maps, the hustle and bustle of the final preparations, the moment of departure, the journey to the vacation site—surely scenes of these activities should be part of your vacation reels proper so that your movie audiences will savor the importance of the occasion. As the crime movie of the professional screen builds up to the climax by presenting the various suspects and clues, so can the vacation movie depict the events which lead up to

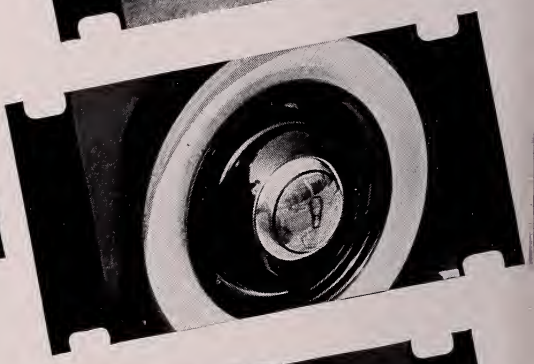















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Most vacation films start with the last movie enlargement on these pages. But if you build up to this point with many terse, interest-promoting shots, you'll really take your movie audiences along on your holidays.

its big moment—the day of departure, when you can begin to do just what you've wanted to do, or thought you wanted to do, during the other fifty weeks or so.

Shots of yourselves window shopping at sporting goods stores, unpacking the new gear or apparel at home, having your favorite service station giving the car a final going over, stowing away the luggage in the car trunk, writing a note for the milkman and tucking it in a bottle on the back porch steps, close-up of a hand locking the front door, the car pulling away from the front of the house, close-up of the speedometer, of a whirling wheel—these are some of the little cinematic bits that will get a vacation movie off to a good start. That last shot—of the wheel—is a simple one to make. When your car is in a gas station, have the attendant jack up the rear end. Then slip the clutch into high and, with the camera located so that just the upper two thirds of a rear wheel is in its range, make a long exposure of the spinning wheel while some one gently rocks the car from side to side to simulate road sway. This one long shot can be chopped up into several pieces to serve as a central theme for the film story of the trip. Get a shot of the speedometer before you arrive at each new town or city

Title these locations with shots of the signs that are almost invariably to be found at the city line. If you miss the one coming in, turn around for a minute and get the one on the far side of the town)—although you'll be cheating the compass, you'll obtain the effect you want. When you pull in for gas or oil, make a few shots as the attendant pokes the hose nozzle into the gas tank, of the pump meter, of the can of oil being thrust into the quart measure and it being emptied into the engine. All these little touches are a legitimate part of a vacation movie that your friends will be quick to comment upon when your movies are thrown upon your screen. Make a few shots through the windshield, to be sure—but pick the best strips of roadway, for jumpy pictures are no tonic to even the most sympathetic audience. Open up a half stop to allow for the light retarding properties of the glass. If you point the camera out of the side windows, do so at a forty-five degree angle—never at right angles. Somewhere along the way make a shot with the camera just off the highway and on the road level as your car swoops around a turn and rushes past. Another excellent bit, if your car and camera are built for it, is to place the camera on the roadway, lock the exposure lever in taking position, and drive directly over it at a good clip. This shot is invariably dramatic—but be sure that the drama comes from a safe clearance of the camera and not from the spectacle of a pulverized movie machine.

The rest is easy

When you've arrived at the lake, bay, mountain—or wherever you have elected to get away from it all—you will not need many suggestions for picture subjects. At this stage of your movie—where, alas, so many vacation movies just get under way—you will have already built up interest for the scenes to follow. And you will discover that if you keep continually alert for movie material, you will actually see and enjoy many more sites and sights than the vague vacationists warming the chairs on the shady side of porches.

Don't anti-climax your film by showing the journey home. But watch out for a few shots of scenes which time or weather prohibited filming on the outgoing trip, so that you can add them, over a splicing block, to your vacation-bound movies. Conclude your movie with a lovely sunset scene or some other shot typical of the site at which you spent your holiday.

All these scenes require a little extra time and trouble on your part, to be sure. But you'll find that they are worth every moment of it. Think back upon the vacations you have had. How much of those days, so anxiously awaited, is left to you now? Perhaps only the memory that you *went to*

Lake Whatyoumaycallit . . . that the fishing was just so-so . . . although it seems that you caught one fair sized pike . . . or was it a "musky?" Just a few highlights, somewhat shadowed by time.

But if you make movies of your holidays, you can enjoy your fun over and over again—the warm laziness of the lake as the guide effortlessly pulled you about, sunrise through the maples, the five minute skirmish with that big bass just before dusk for which Jimmie furnished the comedy relief by falling overboard when he reached out too far with the landing net, the ridiculously solemn owl the pup discovered in the lower branches of the elm by the side porch, the beautiful shellacking you received when you matched your imagined skill at horseshoe pitching with one of the natives, the perfect peace of an hour in the hammock by the boathouse under a canopy of graceful branches and slowly drifting clouds. All of these things can be relished with increased poignancy years from now if a movie camera is your traveling companion.

But not every one whiles away his vacation upon his native soil. So here are a few tips for those who vacation on foreign shores.

VACATIONS ABROAD

Home movie cameras seldom require any servicing, but wise movie makers will take their cameras to dealers for a general check-over before starting on a cruise.

If your itinerary will cause you to hurdle the equator, particularly in

Movie makers planning to vacation abroad in warm climes will do well to order their film tropic-packed in sealed metal containers.



humid lands, give your Ciné-Kodak dealer some advance notice so that he can have your film packed by Eastman in sealed metal containers without extra cost for all roll film and at very modest cost for film magazines. After exposure, remove the film as soon as possible from the camera and replace it in the metal container without sealing. Arrange to have your film—unexposed and exposed—kept in the ship's refrigerator. (But do not put film in an icebox.) For film's chief enemies are heat and moisture—and a refrigerator is "dry." The moisture in a refrigerator is *drawn to* the refrigerating unit, and not *dispelled from* it.

Protecting film in the tropics

It is advisable to dispatch exposed film to a processing station as soon as possible after exposure. Especially Kodachrome. And it is equally advisable to protect film against heat and moisture during this interval. The best method by which to effect this is to pack your film in sealed metal tins into which you have tossed some rice. Plain rice—bleached or unbleached, polished or unpolished. You can obtain it in every land, particularly in the tropics, and it is free from all qualities harmful to film—apparently even when in direct contact with it.

Heat the rice in an open dish over a low flame, or in an oven, until it becomes a light brown in color. It will then be thoroughly dried and can be poured into any convenient tobacco, cracker, or biscuit tin in the proportions of one quarter of a pound of rice per 100-foot roll of film. Pop your films into their opened cartons, and the cartons and film into the tin, and seal it with any efficient tape. The film can now be placed in either icebox or refrigerator—it no longer matters which—and you can have every assurance that it will reach a processing station in first-class condition.

A word about customs. The United States customs laws state that all film manufactured in this country, not intended for commercial purposes, and exposed abroad, whether developed or not, will be readmitted free of duty. Most foreign countries likewise pursue a very lenient policy. A declaration of your camera and film is usually all that is necessary. A few



Mr. Howard W. Miller of New Rochelle, N. Y., filmed this impressive shot of Miss Liberty.



A glimpse of downtown Manhattan from the reels of Mr. F. W. Tillistrand of New York City.

countries require you to put up a bond of nominal amount which is refunded upon your leaving the country. Even in the very small number of countries which have statute charges on the entry of film and cameras, liberal interpretation by local customs officials usually results in free entry. For last minute information on this topic address the Service Department, Eastman Kodak Company, Rochester, N. Y., and send them your itinerary so that they can be thoroughly helpful. They will also be glad to advise you on the attitude of foreign countries toward movie making within their borders . . . on specific taboos in some cases rigidly enforced.

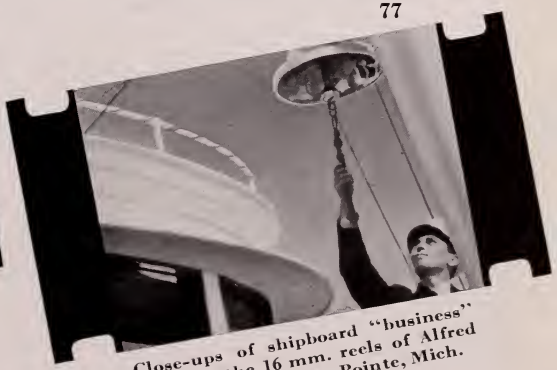
Start your travel movie at home

And don't wait until you're at sea to begin filming. Start with shots at home as you study travel literature, pack bags, bid goodbye to friends or family—one of them will gladly turn cameraman for the shots. Then harbor views—perhaps you can find time to tour the waterfront on a ferry boat for the making of always-interesting ship and wharf shots. If you sail at night, departure shots will be out of the question. But you can overcome this gap upon your return by shooting your entrance into the harbor with the camera inverted—and then reversing these scenes, end for end, in the processed film. See page 138.

Once afloat, special precautions should be taken against a peculiar desire of most shipboard filmers to devote an unnecessarily large amount of footage to brief acquaintanceships made while at sea. Those whom you feel you should "shoot" can be filmed while engaged in some shipboard activity—deck tennis, shuffle board, splashing about in the deck pool, streaming down the gangplank at one of your ports of call. Yet, after all, it's the ship and the voyage which are the memorably new experiences rather than the people who share them with you. The duties of the crew, the tumbled wake astern, porpoises at the bow, the vigilant watch officer on the bridge above you—in fact, the steadfast ritual of life at sea is, in itself, worthy of a carefully planned reel which you can title with close-ups of the ship's bell being rung to indicate the time of day. That is, if you get on the right side of one of the ship's officers so that you can gain entrée to



A filter for "Pan," ship's rail for depth, marks the movies of Karl Thayer Soule, Jr., of Rochester, N. Y.



Close-ups of shipboard "business" brighten the 16 mm. reels of Alfred W. Bender, of Grosse Pointe, Mich.



Miss Ruth H. Maurer of Rochester, N. Y., rightly gave less exposure to this shot of a sunlit deck . . .



. . . than Mr. R. S. McFarlane of Jackson, Mississippi, gave to this sunlit shot of Natchez' "Dunleith."

the bridge, if the bell happens to be so located. You'll find a movie camera is often the open-sesame to many sacred places. Once on the bridge, there is no reason why you can't gather in a few other interesting scenes, such as of one of the ship's compass, the wheelsman, an officer "shooting" the sun, the steady rise and fall of the ship's prow, the engine room telegraph, your less fortunate fellow voyagers on the decks below.

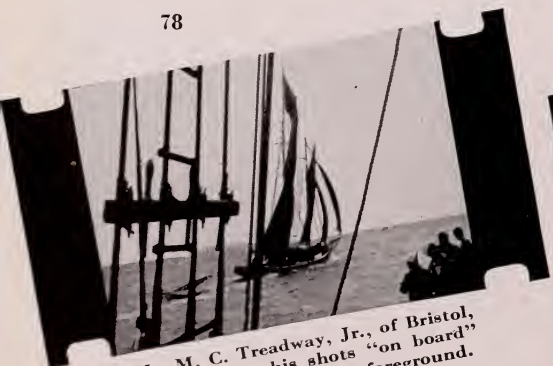
Watch your exposure aboard ship. Sun deck shots are not "average scenes in direct sunlight." There's no grass, no shady trees. Ship scenes are generally light in color, bathed in direct light. Follow exposure instructions based upon beach scenes—a fair parallel.

Keep some part of your boat in the foreground to keep the shot "on board" when filming an entrancing sunset, landfall, or passing ship. Incidentally, don't "follow" other boats or they'll look as though they're standing still. Let your ship be your "camera truck" and carry you and your steadily sighted camera past other ships.

When making movies on days of turbulent seas brace yourself on widespread feet and sight your camera on the horizon as steadily as possible. Then the ship will pitch and roll on the screen—and not the skyline. Don't brace yourself or camera against the ship.

From the moment you step on shipboard be continually alert for bits of life and action that show the distinction between life at sea and at home.

Continue this same technic when you arrive on foreign soil. Don't go in too heavily for famed cathedrals and chateaux—you can get them on



Mr. M. C. Treadway, Jr., of Bristol, Conn., keeps his shots "on board" by having rigging in the foreground.



Another example of Mr. Treadway's technic. There would be nothing to the shot without its foreground.

postcards by the carload. Rather, wander away from the favorite haunts of tourists to spots where you can find the natives as they really are and not as they have found it pays them to appear for tourists. Popocatepetl is not Mexico, nor the "Sugar Loaf," Rio de Janeiro, any more than Times Square is the United States. And again, don't stage posed pictures. If necessary, use a bit of innocent subterfuge. Face away from your unsuspecting victims at a right angle while you keep the lens pointed at them. Make believe that your camera takes pictures from the side instead of from the end. If they think that you are getting a shot of a donkey and cart across the road when you are actually training the lens on them, you'll catch them off their guard. Some movie cameras, such as Ciné-Kodaks, can be placed upon any flat object and the exposure lever locked in taking position—which is another ruse that will invariably work. Merely wind up your camera, start it going, set it down pointing at the scene you want, and then turn your back and whistle at the sky to divert suspicion. You'll have a bit of film to cut out at the beginning of the scene, to be sure. But you'll also have a true-to-life picture. If you encounter unusually coy subjects, a telephoto lens, enabling you to withdraw to a discreet and unnoticed distance, will get you the close-up you want.

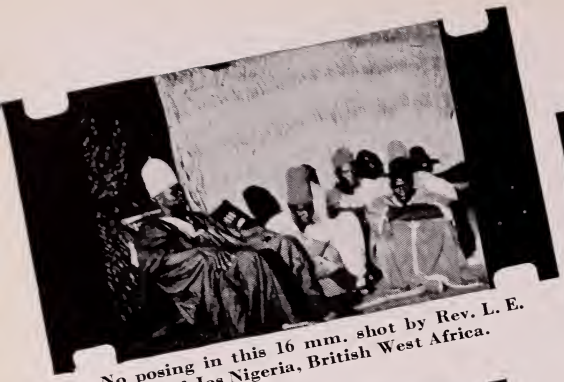
You're the foreigner when you're abroad

Remember one point above all others when you are abroad. *You* are the foreigner. *They* are the natives. They may appear, and act, odd to you. But so, likewise, do you to them—and you are on their home grounds. Be friendly, pleasant—not amused and supercilious. Don't try to hurry matters. Win their confidence first, then take your pictures. Admire the views, the houses, the children—they'll know what you mean, and be flattered by it. The sign language and facial expressions are universally understood. If they see that you like and respect them, reciprocation will be immediate. You'll soon have a host of helpers vying with one another to have you film their view, their house, and their children.

And, by the way—your own friends may cause some difficulty.

Many traveling movie makers have found it rather difficult to combine both friends and movie making. The former all too often spoil the latter. The latest Fifth Avenue vogue looks a bit out of place at Morro Castle. And a hilarious group of fellow travelers, wildly waving hats at you, is not the ideal condiment for some sleepy South American market place. You may well find that it pays to sneak off alone.

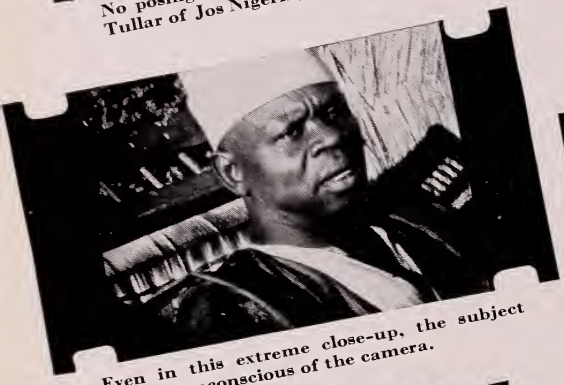
Have your films processed en route rather than waiting until you reach home. This plan has several decided advantages. First, you have a



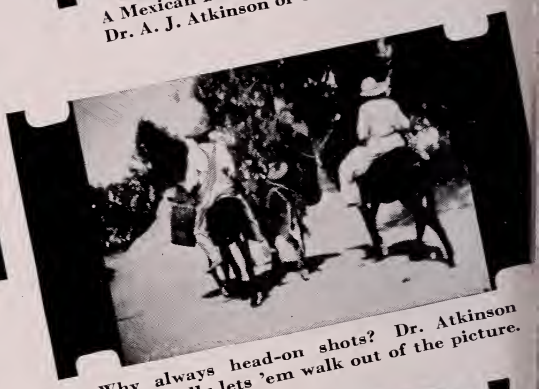
No posing in this 16 mm. shot by Rev. L. E. Tullar of Jos Nigeria, British West Africa.



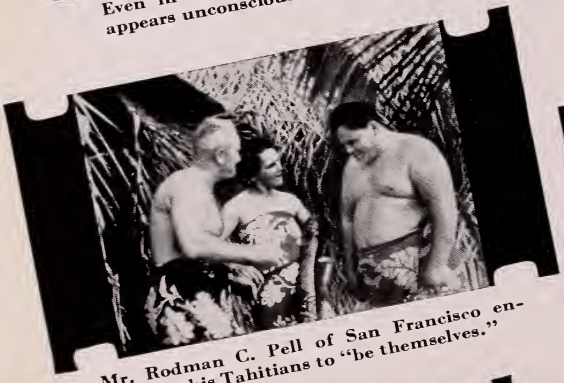
A Mexican bazaar, unaware of the presence of Dr. A. J. Atkinson of Glencoe, Illinois.



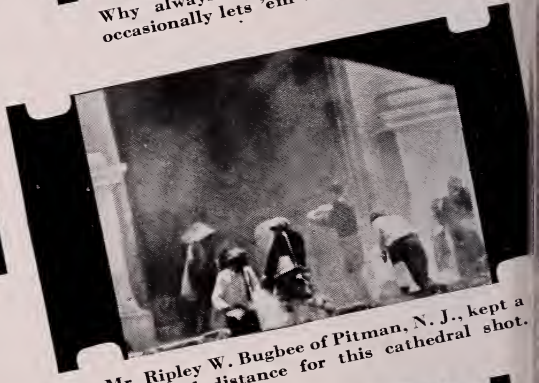
Even in this extreme close-up, the subject appears unconscious of the camera.



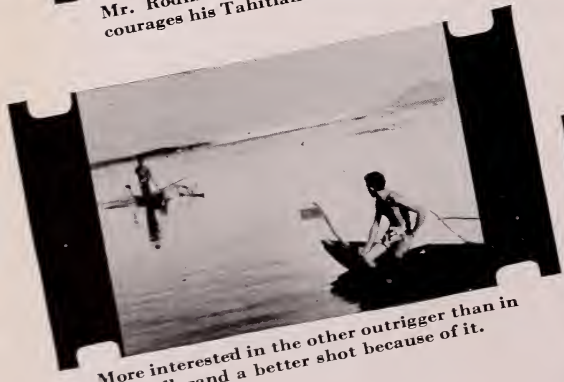
Why always head-on shots? Dr. Atkinson occasionally lets 'em walk out of the picture.



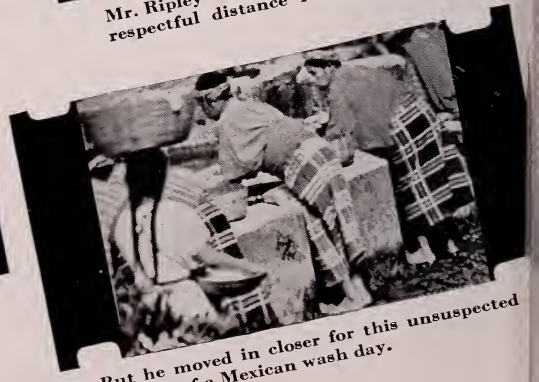
Mr. Rodman C. Pell of San Francisco encourages his Tahitians to "be themselves."



Mr. Ripley W. Bugbee of Pitman, N. J., kept a respectful distance for this cathedral shot.



More interested in the other outrigger than in Mr. Pell—and a better shot because of it.



But he moved in closer for this unsuspected glimpse of a Mexican wash day.

constant check on the quality of pictures you're making, and on the operation of your camera. Secondly, you protect films to a greater degree against the destructive force of moisture in humid climates, and avoid possible fogging through additional handling of the film. A current list of Eastman's world-wide chain of processing stations may be obtained from your dealer.

By the payment of postage you can have any processing station forward your film directly to the Eastman Kodak Company at Rochester, N. Y. It will be redirected free of charge to your home address in the United States.

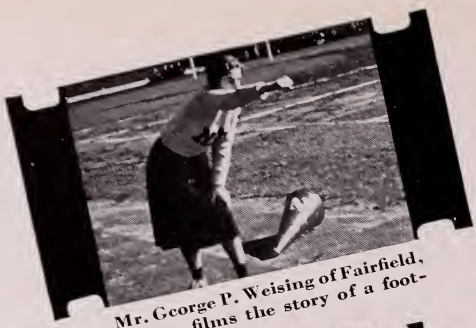
SPORTS AND SPECTACLES

Sports and spectacles come in for a full share of movie film. Let's see where continuity fits into this picture.

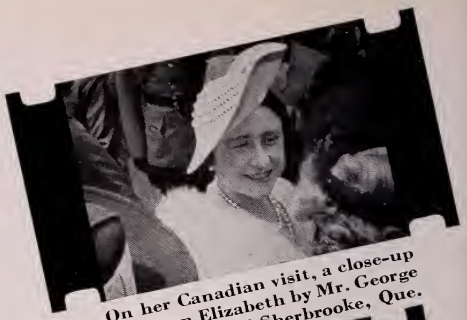
Movies of all sports and most spectacles have much in common with vacation movies, and they are therefore apt to suffer from a similar lack of build-up shots. You wouldn't get half the kick out of a football game that you probably do if it consisted solely of the spectacle of twenty-two young men earnestly trying to maim one another, within the bounds of polite homicide and established regulations, in an effort to move an inflated pigskin beyond a chalk line. Your enthusiasm, which reaches fever pitch at the kick-off, is generated by numerous incidents which precede this thrilling moment. Sports write-ups in the papers, discussions between rabid partisans of your acquaintance, the start for the game, lunch along the way, the congestion of cars as you draw nearer your goal, the crowd at the turnstiles, the emblem venders, hurrying silhouettes in the passageways, partly occupied tiers of seats, the filling stadium, marching bands, entrance of the teams, enthusiasm of nearby spectators, the teams drilling—and then, finally, the kick-off. And once the game is under way, keep your eyes open for other bits of "business." The sight of a "back" straight-arming his way around left end is a stirring sight. But it becomes still better if it's set off by a brief glimpse of one or two hysterical onlookers. You can't get them whooping it up during the play you're filming, of course. But you can nail them on the next play—and their enthusiasm will be just as genuine when seen on the screen. And certainly you'll want some shots of the scoreboard and bands between periods. (And here, by the way, is another instance where a telephoto lens comes in handy.)

Then why not have your movies reflect as much of this atmosphere as practicable? By this method you will generate for your movie audiences the same interest in the game that you experienced on the day you saw it.

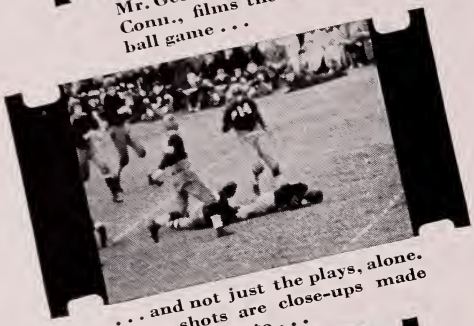
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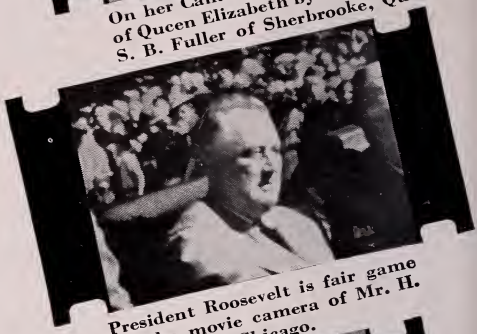
Mr. George P. Weising of Fairfield, Conn., films the story of a football game . . .



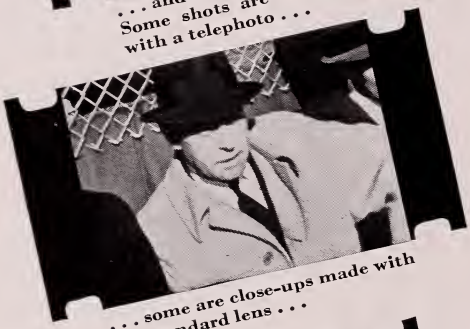
On her Canadian visit, a close-up of Queen Elizabeth by Mr. George S. B. Fuller of Sherbrooke, Que.



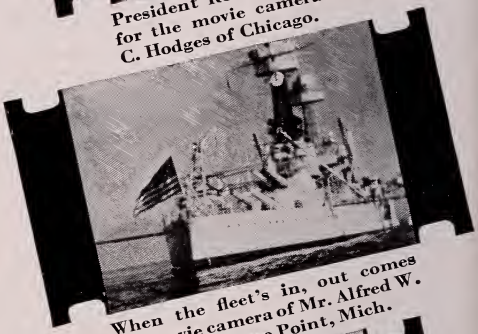
. . . and not just the plays, alone. Some shots are close-ups made with a telephoto . . .



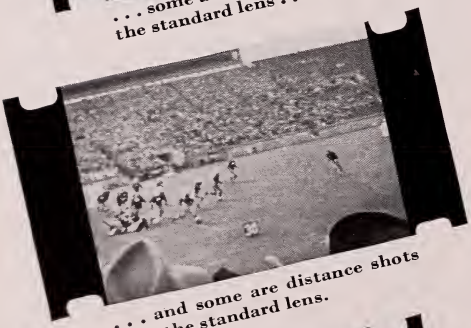
President Roosevelt is fair game for the movie camera of Mr. H. C. Hodges of Chicago.



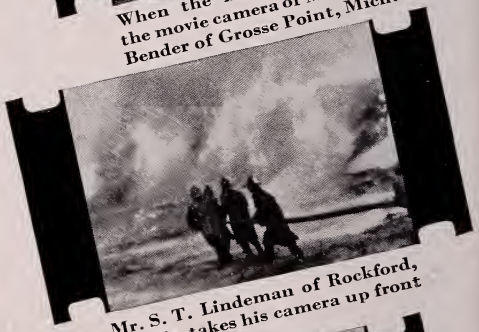
. . . some are close-ups made with the standard lens . . .



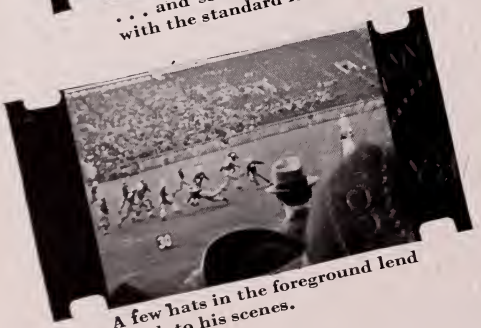
When the fleet's in, out comes the movie camera of Mr. Alfred W. Bender of Grosse Point, Mich.



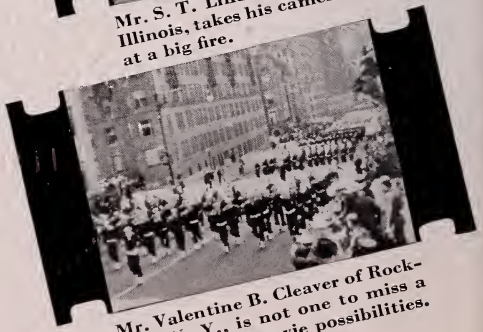
. . . and some are distance shots with the standard lens.



Mr. S. T. Lindeman of Rockford, Illinois, takes his camera up front at a big fire.



A few hats in the foreground lend depth to his scenes.



Mr. Valentine B. Cleaver of Rockville, N. Y., is not one to miss a parade—or its movie possibilities.

Without it you merely plunk your audiences down into the middle of things without giving them a chance to get warmed up to the idea. And you can easily get most, if not all, of these shots—even the one of the newspaper write-ups. The technic for this is described in a later chapter on titling.

What is true of football is true of almost all other sports. In between your shots of the games or races, salt little bits of "business"—as our professional contemporaries have it—to lend color to your films.

There are lots of opportunities in many big events which suggest movie making—such as parades, dedications, the circus, fairs, and the like. Build up audience interest with shots of urchins peering under tent flaps at the circus, an enthralled youngster along the line of march of a parade absently licking an ice cream cone. Unexpected spectacles, such as fires, eliminate most of your opportunities for preclimax shots. But you can probably get one or two scenes of people running toward the blaze. And if you are patient, you may get a shot of a fire engine answering another alarm, even though months and miles away from the original day and site. Besides the views of the fire which you are certain to take, look about for interesting shots of spectators, of throbbing pumpers, spurting couplings in the hose lines, harassed firemen, pitiful piles of salvaged belongings. All these bits make the movie.

OTHER CONTINUITY THEMES

There are the four seasons of the year—the outward evidences of which are worthy of a reel of movie film. The first crocus shoots thrusting through late snow might start your reel of spring; a foot tentatively dipped into a lake could serve as the beginning of your summer reel, just as the first flutter of leaves might launch your fall reel, and a huddled and wind-buffeted group about a large commercial thermometer, then shown in a close-up, would quite effectively begin a reel devoted to winter. Turbulent spring freshets, a basking snake or turtle, cattle huddled in the lee of a windswept barn, the snow-engraved tracks of a rabbit—the hundreds of picture bits symbolic of seasons need not show faces or sights at all familiar to your family or friends, yet your film story can be engrossing if continuity is the leavening factor.

Poems, such as Tennyson's *The Brook* fairly beg to be transformed into film. One verse for each title, then a half dozen scenes to illustrate each verse—there's no harm done if you blend a dozen brooks into one — on the screen they'll flow together to bear tribute to your cinematic foresight.



Mr. Ripley W. Bugbee of Pitman, N. J., finds continuity themes in poems. You can readily imagine the beauty of these scenes in their original 16 mm. Kodachrome. Note that they are close-ups!

You can build an entire reel around wheels—the auto, train, or bicycle—wheels that make possible the succession of shots seen on your screen.

Smoke might be the theme—smoke puffed from a pipe as you plan a vacation; smoke from a locomotive stack as you leave your home town; smoke from your campfire as you cook your day's catch. You can even "dissolve" one scene into another by blowing a lungful of tobacco smoke past the camera's lens at the conclusion of one scene and start of another.

Hands or feet, alone, can turn the trick. Hands, as the theme of a Christmas reel—wrapping and tying gifts, addressing cards, decorating the tree, placing the gifts, pressing the light switch on Christmas Eve . . . preparing and serving dinner on Christmas Day. Feet, as the method of propulsion on a hike or mountain climbing expedition.

Trunk and baggage labels in close-ups set the note and locale of a series of travel shots.

A circus, the zoo, trains, the waterfront, famous buildings—all suggest their own continuity. More than one movie maker has blended the real with the make-believe—a big top circus with a youngster's sawdust ring, the city zoo with a child's multiple-jointed wooden animals, thundering "limiteds" with a son's electric train



Just another day for the movie subject of Mr. Leslie P. Thatcher of Toronto — but an absorbing bit of continuity ready-made for every cinamateur.



Holiday movies are invariably interesting—even more so when they are enlivened by a "running gag," such as the repeated screening of a particularly hapless member of a fishing party.

set, palatial liners and puffing tugs with a boy's tin flotilla in tub or pool.

A new house—from blueprints to moving day, and after—is another worthy excuse for movie making.

Hobbies—amateur cabinet making, ship modeling, hunting, gardening, sailing, golfing—there is literally no end to them. And each and every one, if you mix close-ups with medium shots and seek unusual camera angles, is deserving of its own reel and continuity.

THE "RUNNING GAG"

Another aid to continuity is that professional ruse known as a "running gag." The word, "gag," suggests that it is generally used for comedy effects, and, as with so many Hollywood stunts, you can use it with equal ease and effectiveness.

Perhaps your reel is of a fishing trip. One of your party—either because he is an expert angler, or is hopelessly inept—might well be shown again and again throughout your movie reeling in his or her line and dolefully regarding an empty hook. There's nothing particularly hilarious about this shot the first time you see it—nor should there be in a running gag. But it gains zest through reiteration. After a half dozen views of the hapless fisherman or fisherwoman, you might well conclude your gag with a shot of a tiny minnow on that selfsame line. Or perhaps your movie is merely of a week-end at the beach. You and your friends are shown diving, swimming, playing games—having a grand time. Interspersed throughout all these filmed activities there might well be an occasional shot of a portly gentleman who cautiously lumbers out to the end of a springboard, poses with elephantine grace, and then, changing his mind, retreats to his beach umbrella. The first time, you can well shoot the entire action—from umbrella—to springboard—to umbrella. No one will be likely to laugh, or even suspect a future appearance. But his second appearance will get chuckles, his third a laugh, and his next howls of appreciation. Cut down on the length of your scenes with each succeeding appearance—just a shot of his feet on the board will be cue enough for merriment. And at the conclusion of your reel, if that same timid soul is again shown heaving himself upright, ambling out on the board, posing—and then apparently losing his balance and crashing into the water with a resounding splash, you'll have your movie audiences weeping with delight. And, what's more important, ruefully commenting on the brevity of your beach movie. Or you could turn the tables on your audiences, if your plump friend can really dive, by having him take off in a graceful "swan."

Repetition turns the trick

There needn't be anything even remotely funny about a running gag in order to have it convulse an audience. A man lighting a pipe is a commonplace spectacle. But if your movie is of a holiday jaunt on a private boat, or an extended cruise on an ocean liner, and time and time again a dignified male is shown striking a match and having it blow out before he can get his pipe going, your living room movie audiences are going to regard it as being just about the most amusing spectacle known to man—especially if the last shot shows your windblown victim dropping his pipe overboard and suddenly taking another, already ignited, from his pocket, and amazedly regarding its smoke even as he reaches for match or lighter.

But this chapter on continuity has gone far enough. In it, one thought



has been uppermost—to drive home the all-important fact that any subject can *and should* be filmed from many angles and viewpoints and that this succession of scenes should lead your movie audiences logically and interestingly through your film story, the total of which represents *one* movie of *one* subject. Sometimes a little plot can be invented to advantage —and this subject is amplified in a later chapter entitled, "Play Making." But generally all that is necessary is to remember that your camera is a movie camera and that you show the different scenes it makes, consecutively, and not individually. Take your movies with this thought in mind and you'll have interesting movie shows. That's a promise!

She: "And that's all for this lesson. Think you've learned anything?"

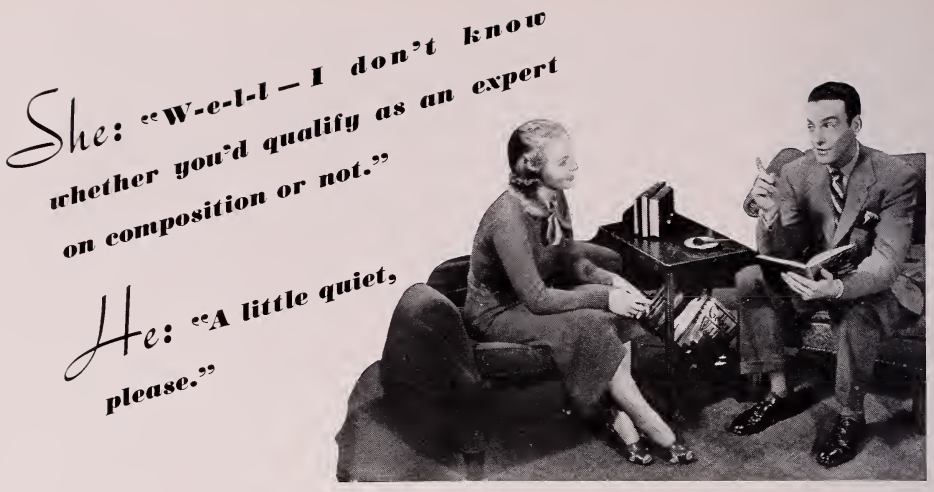
He: "Have I! I'm going to run through that continuity chapter again."



COMPOSITION

YOU may not be able to read a note of music—know nothing of the technic necessary for playing a single musical instrument—yet you recognize good music when you hear it.

A similar knack of seeing good composition is inborn in most every human. It has been said that, to any one who can hang a picture at the right spot on a wall, photographic composition should be easy.



There's a lot to the idea.

Hundreds upon hundreds of amateur movie makers who know nothing at all about the principles of composition . . . who are, in no sense, artistic . . . can yet appreciate good composition when they see it in the finders of their cameras. The composition is already there. If you like it, shoot it. If you don't like it, move your camera to another position so as to get new composition of the same subject. If you still don't like it, forget it—and seek a new subject.

And watch those finders!

If your camera has an eye-level finder system, your eye, by shifting its view but slightly beyond the limits of the front finder, will see a great deal more of the scene before you than will be covered by the finder—and, hence, by the lens and film. Your subject might be a child in a garden. In fact, you may have purposely maneuvered the child into the garden so as to add its beauty to your shot of the child. Yet, on the screen, the lovely background may be but slightly apparent because you expected the camera to look upon the scene with the same wide-angled view of your eyes.

What's wrong with these two pictures? The backgrounds, of course. It's "finders keepers" in movie making. Study the story the finders tell.



Sometimes the matter is reversed. In your concentration upon the major target of your camera you may not notice that objects of no importance or of downright injurious character are intruding upon the interest and attractiveness of your scene in the background. While it is well and good to feel that you are not seeking a cinematic masterpiece every time you pick up your camera, it is equally important to realize that just a little thought about the appearance of the image in the finder will generally spell the difference between shots that are just so-so and those that are really splendid. For, while you may not notice the poorer aspects of mediocre shots the first or second time you project them, you will soon begin to kick yourself mentally because you didn't give them a bit more thought at the moment of taking. Dig out one of your first reels and run it through your projector. A dozen little improvements will immediately suggest themselves, *just as they would have on the day you took these scenes*, had you but paused a moment and analyzed what you saw in the finders.

COMPOSITION FUNDAMENTALS

Experts will trip glibly through phrases such as circular observation, radiation, cohesion, and the like. But you are doomed to disappointment if you expect to delve into such as these through the medium of this book. Yet we can talk freely of rules of thumb such as the division of thirds—which simply means that you will probably be prouder of a scenic shot if you frame it in your finder so that, if there were two vertical and two horizontal lines dividing it into rectangles of equal size, the most important part of your picture would be located at one of the intersection points of these lines.

And perhaps you already know that handy and closely related principle



It's easy to recognize good composition in the camera finders when you see it. Mr. Lew Nichols of Missoula, Mont., made the shot of the horsemen, Mr. Tim Fitzgerald of Lake Placid, N. Y., filmed the canoeists, and Mr. Herman F. Siewert of Winter Park, Fla., shot the tropical sunset.



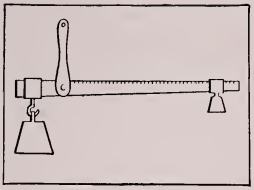
Horizon lines, one-third, one-half, and two-thirds of a picture's height. The middle shot would have been far better with less sky. Miss Edith M. Royky of Sioux City, Iowa, made the hiking scene . . . Mr. Alfred W. Bender of Grosse Point, Mich., filmed the boat shot.

calling for the horizon line to be one-third, or two-thirds, up into the picture. Why? Simply because it looks better that way. When to use the one-third rule and when to use the two-thirds rule is determined by the scene itself. If the foreground is more interesting than the background of sky—perhaps because there are no interesting cloud effects—you should give the foreground two-thirds of the picture area and the sky one-third. If, on the other hand, the foreground is but uninteresting meadowland or water, and there are impressive cloud effects in the sky, you then should give the sky and clouds the major portion of the picture area — *if you have a color filter on your camera when using black-and-white film.*

Then there is the steelyard principle, which means picture balance. A large object of neutral tone on one side balanced by a smaller object of more vivid tone on the other side. In other words, a balancing of tonal values rather than sizes. Visualize it by considering a subject such as a beautiful oak tree standing boldly forth against a lovely cloud effect. The one and only subject of importance is that oak tree. Offhand, it might seem that you should spot the tree right smack in the center of your picture area. But you shouldn't. You'll like it better if you have it at one side of the picture and lend the shot balance by having a distant white house, or a smaller and more remote tree, or even just a striking section of the cloud effect, at the other side.

FRAMING

For the sake of brevity we'll lump under the term "framing" any use of foreground to set off background.





The steelyard is a handy photographic guide. It's all a matter of balance—a small area, strong in interest or tonal values, balances a larger and perhaps less important area.

Mr. Edward L. Mossawir, of San Francisco, made the bridge shot at the right . . . Mr. Tatsuichi Okamoto of Japan filmed the child and doll.

Trees, or their trunks and branches, are the allies most commonly called upon by the movie maker cognizant of the value of framing a picture. Archways . . . the decorative pattern of iron grillwork . . . these are able substitutes.

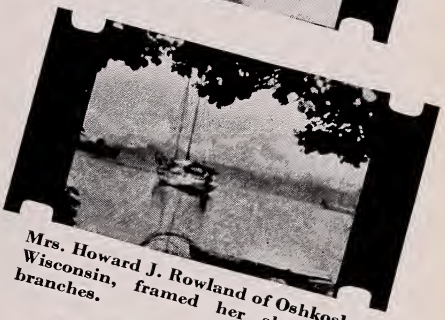
Framing not only lends contrast to scenes—branches, for example, invariably appearing darker than the rest of the scene—but it also gives a picture depth.

But this business of framing does not always call for the use of foliage. Nor need a distant object be framed on all four sides. The main idea is to produce *depth* and *contrast*. You can make charmingly framed shots through windows, or the portholes of a ship. You can merely use the corner of a building to indicate the distance to some other building beyond it. The main idea is to avoid flatness of reproduction.

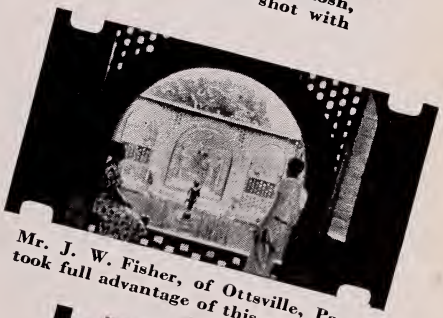
Turn through the pages of this book. Notice how often the scenes you like best will have something in the foreground to lend the scenes a third dimensional effect.



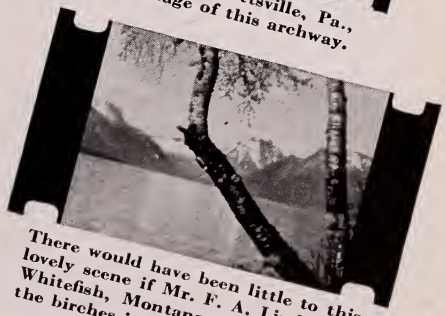




Mrs. Howard J. Rowland of Oshkosh, Wisconsin, framed her shot with branches.



Mr. J. W. Fisher, of Ottsville, Pa., took full advantage of this archway.



There would have been little to this lovely scene if Mr. F. A. Lindlief of Whitefish, Montana, had not kept the birches in the foreground.



SIDE AND BACKLIGHTING

Probably the first photographic caution you ever heard was "keep the sun at your back."

Forget it.

What your early mentor meant to say was, "Don't let the sun shine into the lens." And this is a horse of an entirely different hue. The flat lighting that comes from the sun-behind-the-back technic is entirely satisfactory, although not necessary, for Kodachrome filming, in which ample contrast is produced by varied coloring (see later chapter on Kodachrome), but it should be avoided with black-and-white filming. Sidelighting or backlighting produces contrast and shadows. And contrast and shadows bring depth to a picture, give the onlooker the sense of looking *into* the scene rather than looking *onto* a flat screen carrying flat images. That is why you have probably liked the pictures you made early and late in the day better than those made at midday—for in the former you inevitably obtain long shadows.

You probably don't even like to look at subjects lighted with midday light, if you'll stop to think about it. Things look dead because of the

At the top is the "burnt-hole-in-a-blanket" effect on eyes born of overhead lighting. Below it the usual result of head-on sunlight. Third from top is how Mr. George P. Weising of Fairfield, Conn., uses a bit of sidelighting in his movies. Below it is a charming example of backlighting from the reels of Mr. E. M. Barnard of Kansas City, Mo. And at the bottom you see a Tahitian beauty as filmed in open shade by Mr. Rodman C. Pell of San Francisco.

effect of overhead light. Flat, uninteresting. When the sun is behind your back you get about the same effect. There are shadows of course—but you can't see any except your own. Every object in sight baldly reflects light. But when you look at the same object sidelighted, the scene begins to take character. Shadows stream across your picture area. Your movie has gained roundness, depth, interest. Those imaginative and dramatic still pictures, that have more recently adorned the advertising pages of magazines, ably convey our meaning. Their subjects may be a jar, a package of cigarettes, a few matches—perhaps only a lowly pin. But when the photographers have finished lighting their subjects, they take on the majesty of a Matterhorn.

In all truth, flat front lighting on subjects is the least desirable of all—especially for black-and-white filming. As a matter of fact, you'll often want to look the sun right in the eye and make movies of it—but only when it has lost most of its potency in the late evening by being partly obscured by clouds, trees, houses, or what not. If you can look at it without eye strain, you can make movies of it by merely setting the diaphragm marker at its widest aperture.

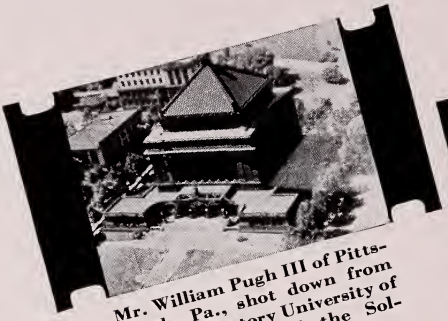
Stand someone in a blazing overhead sun and your movie will record him with forehead and cheeks of toneless alabaster, eyes like two burnt holes in a blanket, and a nose that would fit him to play the lead in Cyrano de Bergerac. Face him into direct sunlight, and, though you'll escape the grotesque effects of overhead light, his face will be as flat as the proverbial pancake. Sidelight him a bit—*just a bit*—and forehead, nose, and cheeks will begin to assume natural contours. Backlight a feminine subject, particularly if she has blond wavy hair, and, if you expose for the face instead of the hair, it will form a charming halo which should really be placed upon your head in reward for your foresightedness.

All in all, shadows play surprising tricks with human physiognomy. Many smart movie makers prefer to make close-ups when their friends are in open shade where there is plenty of light—but not enough to make the subjects squint or to cause distortion of their features. Then there are no shadows to worry about. Try this technic—you'll like the results.

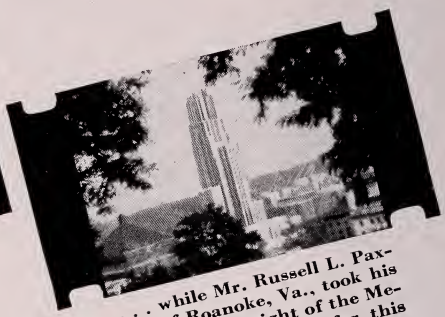
CAMERA ANGLES

Here—to continue in our role of iconoclast—is another quickener of movie interest which has, until recently, been held in ill repute. Almost any camera angle, except the horizontal eye-level commonly used, will generally produce some distortion. And distortion has for years been rigidly tabooed.

Yet it is today, and rightly should be, frequently called upon to accentuate the dramatic or humorous possibilities of a subject—and often, if for no other reason, to break up the monotony of a continuous succession of eye-level shots. Wise movie makers do not hesitate to stoop or climb to conquer an otherwise uninteresting viewpoint.



Mr. William Pugh III of Pittsburgh, Pa., shot down from atop the 42-story University of Pittsburgh toward the Soldiers' Memorial . . .



. . . while Mr. Russell L. Paxton of Roanoke, Va., took his stance to the right of the Memorial and shot up for this view of the University.

You have undoubtedly already called upon the benefits of camera angling to add spice to your reels. Probably a tall building or monument was the excuse—you shot *up* to show its towering summit, or shot *down* to show the ant-like humans scurrying around beneath its loftiness. But this application of angling need not stop with objects hundreds of feet in size. A train is symbolic of power. And power of size. So most shots of trains appear at their best when filmed from the ground level, unless you are attempting to illustrate the ingenuity with which railroad engineers route railroads on sunken tracks or elevated trestles. While you could probably crawl down or up to their level, you will do best to camera-angle.

She: "Oh dear—when I think of all the perfectly simple things we haven't done, I'm almost afraid to look at our old movies."

He: "I'm not. They're pretty good—but they'll be better from now on."



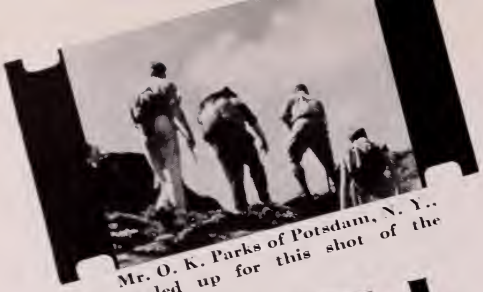
At the right you see how a pup looks to his young master, and below it how the boy looks to the pup—logical camera angles to use in a movie of them both.

Here's a more homely illustration of camera angling—a puppy and his young master. The young man may still be in knickerbockers, but he is of imposing size in the pup's eyes. If you're making movies of them both—and when these two are together no others exist—you will do well to make your shots of the pup from the viewpoint of the boy and of the boy from the viewpoint of the pup.

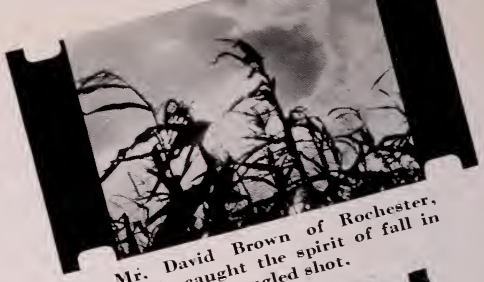
From what viewpoint, for example, would you film a friendly golfer in the throes of a 225 yard tee shot? If you've assimilated the essential quality of movies by now, you'll recognize that but one scene is an animated snapshot and two or more a movie, and will reply, "From several angles." And a good sequence would be—a ground-level close-up of the golfer's hand bedding the ball on a tee, another of his grip as he waggles the club, a full-length shot from the side, and then another close-up from ground level a few feet in the rear of the ball. For, being a friendly golfer, your subject will not be averse to driving an extra ball so that you can get this unusual worm's-eye view of the ball zooming upwards to land and bound some 175 yards away—all of which can be recorded on the film if your



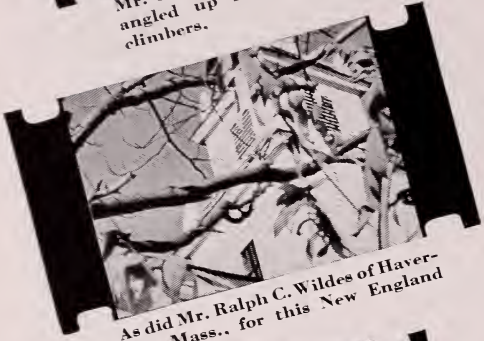
A movie of a man driving a golf ball might well call for three differently angled shots, made at three different distances—as shown at the right.



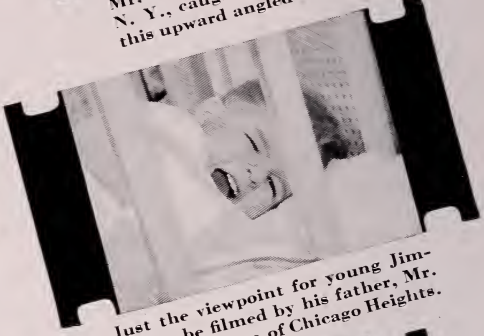
Mr. O. K. Parks of Potsdam, N. Y., angled up for this shot of the climbers.



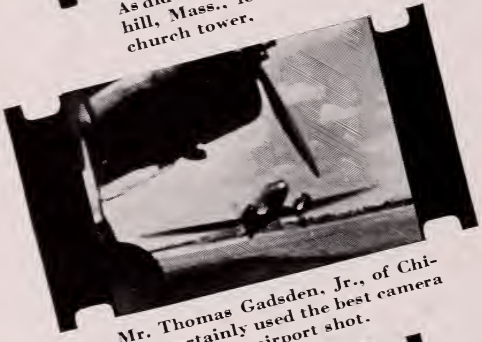
Mr. David Brown of Rochester, N. Y., caught the spirit of fall in this upward angled shot.



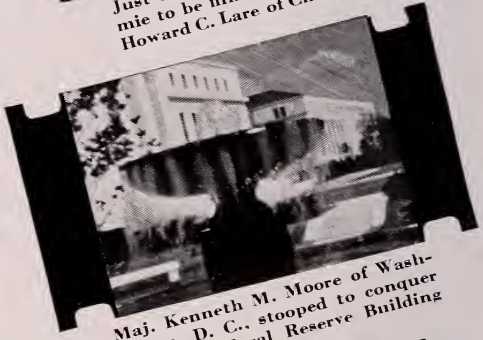
As did Mr. Ralph C. Wildes of Haverhill, Mass., for this New England church tower.



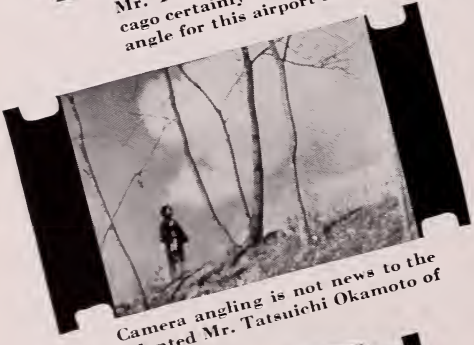
Just the viewpoint for young Jimmie to be filmed by his father, Mr. Howard C. Lare of Chicago Heights.



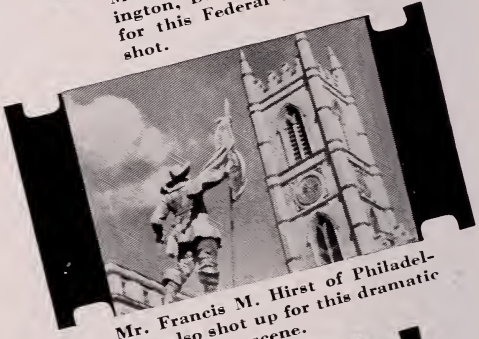
Mr. Thomas Gadsden, Jr., of Chicago certainly used the best camera angle for this airport shot.



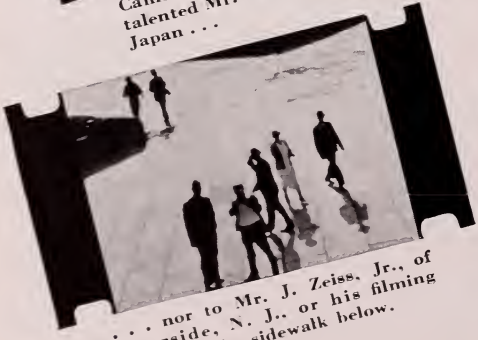
Maj. Kenneth M. Moore of Washington, D. C., stooped to conquer for this Federal Reserve Building shot.



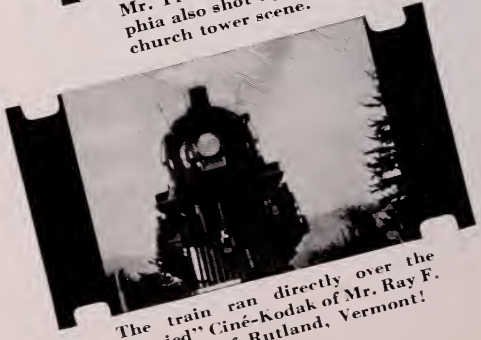
Camera angling is not news to the talented Mr. Tatsuichi Okamoto of Japan . . .



Mr. Francis M. Hirst of Philadelphia also shot up for this dramatic church tower scene.



. . . nor to Mr. J. Zeiss, Jr., of Riverside, N. J., or his filming friend on the sidewalk below.



The train ran directly over the "buried" Ciné-Kodak of Mr. Ray F. Haseltine of Rutland, Vermont!

golfer uses a shiny new ball to improve its visibility from a distance.

This, then, is the major use of the camera angle—to add variety to different shots of the same subject. Another use is to tie it up with the nature of the subject—similar to that ground-level shot of the golf drive.

But often camera angling can be used to advantage for other reasons.



Mr. Okamoto again—this time demonstrating the value of upward angling for close-ups.



Upward angled close-ups feature the color movies of Mr. M. Rayhack, of Garfield, N. J.

You may, for example, want to avoid including some unpleasant background in a picture of a pleasant foreground object. By angling your camera upwards from a low vantage point, or downwards from a greater than average height, your background will become either sky or ground—and the former, incidentally, knows no equal as an appropriate background for close-ups. In Kodachrome, particularly, its rich blues and cottony white clouds make an ideal frame for the color tones of eyes, cheeks, and lips.

And certainly under the head of camera angles should come the reminder to film most moving objects from an oblique angle rather than head-on or at a right angle. Keep the camera trained steadily on one spot—let the action enter and leave the field of view. The acuteness of the angle can largely be determined by the pace of the subject. If you are filming a plowing scene, you can approach a right angle because the slow plodding of the horses past the camera's lens will permit a scene of average length. If, on the other hand, your subject is speeding automobile traffic or an onrushing train, you will necessarily have to operate from a far more acute angle or your subject will speed past the field of view almost before it can be recognized.

All of which holds equally true when you're filming *from* a fast moving object, such as an automobile or train.

The admonition to hold the camera still does not mean that action should not occasionally be followed by your camera—a horse race or 1500 meter track event, for example. There are few prettier movie subjects.

The hitch in this plan, as far as the average movie maker is concerned, is that he will seldom be able to achieve a position from which he *can* follow action. Such vantage points are, generally, the exclusive realm of professional picture makers. Cinamateurs must take their stand near the end of a straightaway or thrust their cameras over a rail and angle down the track. At that, there are few better viewpoints for the making of dramatic bits of a race, which is probably all that you are seeking.

CLOSE-UPS

The value of close-ups cannot be over-emphasized. By close-ups we do not merely mean the features of family and friends, but of all objects appearing in your reels. Not least among their virtues is the fact that they break up a series of medium or distant shots. Yet perhaps their outstanding advantage is that they show objects on the screen as you see them in life.

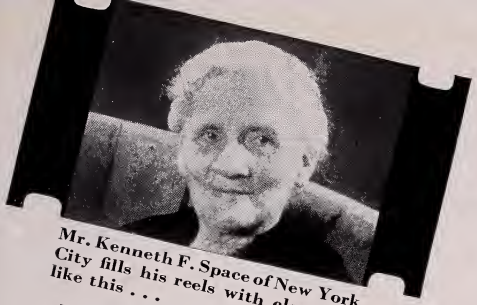
When you meet an individual you grasp him by the hand and look into his eyes. You don't stand off at a distance of several feet and view him as a full-length figure—nor should your movie audiences.

When you start a tennis game you probably *unpack* three immaculate tennis balls from package or vacuum tin, *tighten the net* to approved height as gauged by the length and breadth of a racket, *carefully toe* the service line, and *serve*. And all these little points should be recorded in close-ups for the benefit of your screen audiences.

When on a fishing trip you *oil* and *clean* your reel, *assemble* the rod, *thread* the line, *attach* the spoon or spinner, *cast*, *scrutinize* the level wind as you reel in, *hang up* the line to dry at the day's end—and all these little bits of fishing business, when seen on the screen in close-ups, add conviction to your movie story.

When you take an automobile trip you *study* road maps, *load* bags in the luggage compartment, *read* route and distance signs, *note* town limit signs, *check* mileage, *watch* the gas station attendants add water, oil, and gas, *check* on the gas pump meter, *count* the change the attendant returns to you —and all these incidentals, when thrown upon your living room screen in close-ups, make a travel reel ring true.

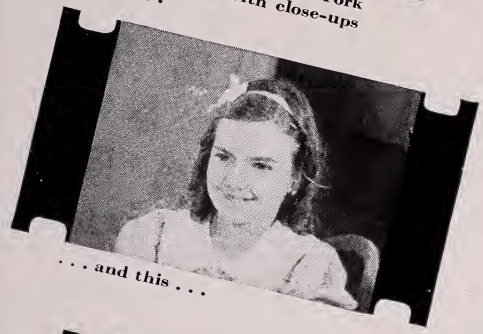
When you watch a child at play, you smile at its *intent expression*, *chubby hands* patting down a sand pie and decorating it with pebbles and shells, *toddling* to the nearest hose connection and *filling* a watering can after an *earnest struggle* with the faucet handle, *detouring* in sudden fright at the presence of a bee or wasp on the wondrous "pie"—all these items, when reproduced in close-up proportions, add delectable flavor to a movie record of a youngster.



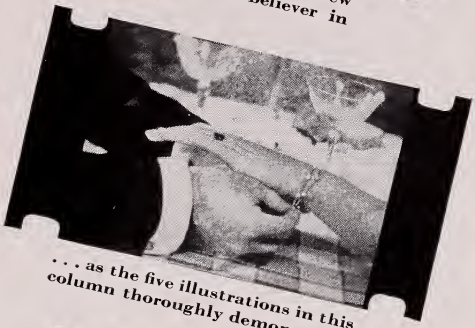
Mr. Kenneth F. Space of New York City fills his reels with close-ups like this . . .



Mr. Charles J. Carbonaro of New York City is a firm believer in close-ups . . .



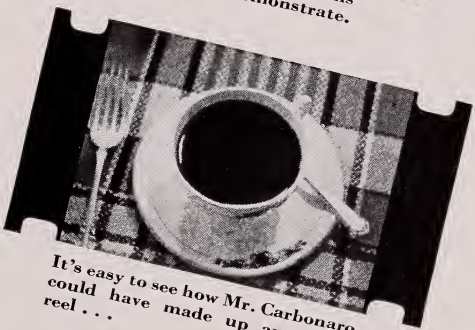
. . . and this . . .



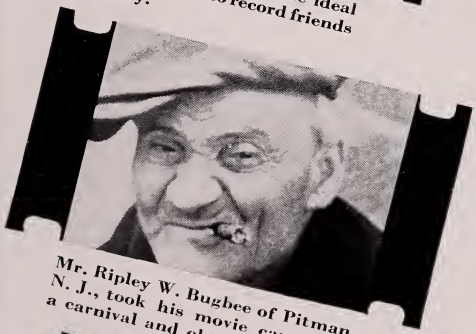
. . . as the five illustrations in this column thoroughly demonstrate.



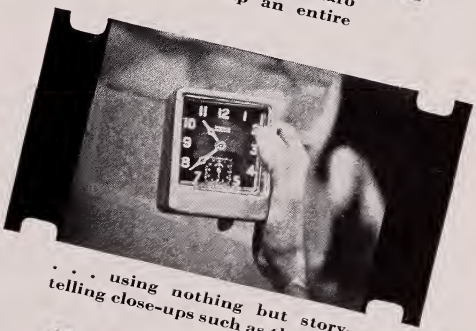
. . . and this—certainly the ideal distance at which to record friends and family.



It's easy to see how Mr. Carbonaro could have made up an entire reel . . .



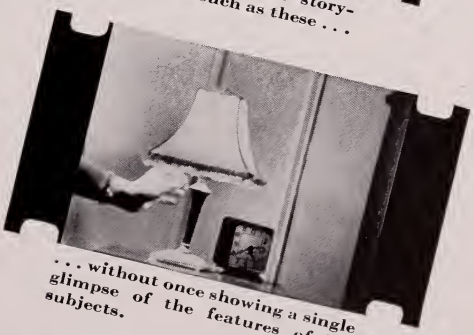
Mr. Ripley W. Bugbee of Pitman, N. J., took his movie camera to a carnival and obtained . . .



. . . using nothing but story-telling close-ups such as these . . .



. . . this study of a horn-tooting youth and the portrait of the gentleman above.



. . . without once showing a single glimpse of the features of his subjects.

She: "Ouch—this close-up idea touches a tender spot. I don't think we've a dozen head-and-shoulder shots in our whole movie library."

He: "But we're going to have—s'help me!"



Few reels have ever possessed too many close-ups. Most reels have too few. Banish the impulse to back up until all of your subject is included within the limits of your camera's finders. Make one or two shots in this manner, of course. But then work in close, shoot up, shoot down—get several different aspects of each subject. For yours is a movie camera which should film subjects in sequences, and not unrelated individual shots. And close-ups are the seasoning that puts spice into a movie menu.

An earlier chapter in this book, on lenses, tells you, too, how helpful telephoto lenses and portrait attachments can be in achieving the very "closest" close-ups.

KODACHROME

YOU have already read a brief description of the individual properties of both regular Kodachrome and Kodachrome, Type A, in the film chapter of this book. You have probably also discovered that many of the ideas and suggestions regarding the making of black-and-white home movies are equally as useful to full-color movie makers. Because all the references pertaining to black-and-white films are not necessarily true of Kodachrome, the use and enjoyment of this full-color film is a matter deserving of individual consideration.

When Kodachrome was first introduced many movie makers "tried" a roll or two—somewhat as they might put fork to a new and exotic dish of tantalizing aroma but doubtful calorie content. They apparently re-



Could anything be more real than this? Best for almost every subject, Kodachrome reaches peak effectiveness when it is used up close for sharpest detail.

This illustration and all other color plates in this book were engraved directly from Kodachrome originals.

garded it as more suited for a condiment than as a balanced diet. "Color movies," in the past, had been for the few—the few with movie cameras possessing ultra-fast lenses.

Yet here were color movies for any standard 8 mm. or 16 mm. camera, regardless of lens equipment . . . color movies which could be shown with any 8 mm. or 16 mm. projector . . . color movies with an ease and range comparable to that of black-and-white film. No fuss. No filters.

It seemed incredible a few years ago.

Yet today most movie makers are using Kodachrome—indoors, outdoors, fair weather, or foul. They have discovered that this remarkable color film is the nearest thing, photographically, to life itself. They have discovered that only Kodachrome can do full justice to their camera subjects.

Kodachrome no fair weather friend

Let's be frank about it. Kodachrome has taught us all a lot about movie making that we never knew before. And a lot about Kodachrome—uses and possibilities exceeding the fondest expectations accompanying its introduction.

Bright sunlight—this was supposed to be nothing less than a necessity to successful results with a full-color film. Then in came thousands of marvelous movies exposed on cloudy days, in the shade—even in the rain.

Full front lighting—this, too, was a "must" for satisfactory color movies. Side- and backlighting were strictly taboo. But movie makers soon proved that a wise use of contrasty lighting was quite often a help, rather than a handicap.

Its thousands of users have convincingly demonstrated that *this* color film does not have to be pampered.

Let's review the "do's" and "don't's," seen in the light of its proved versatility.

Almost as "fast" as black-and-white

Although Kodachrome is not as fast as the "X" black-and-white films, its speed is nevertheless sufficient for the making of satisfactory dull-day scenes. Yet this is only a half truth. Kodachrome frequently takes the better picture when the light is poor. It will not have its rightful life and sparkle—that's obvious. But the Kodachrome version will have *color*. The colors will not be gay, but there will be color—just about as you saw it when you filmed the scenes. And that, after all, is the idea of movie making, isn't it?

He: **"Well I'll be hanged. And I thought that you could only make color movies in bright sunshine!"**



Most movies, you'll agree, are made of family . . . of friends. They should not be filmed in brilliant sunlight if you want to show them at their best. Bright sunlight causes squinting. Bright overhead sunlight produces harsh shadows around the eyes. Open shade is the best type of light for portrait close-ups—just out of the sun and facing plenty of blue sky. You'll then obtain true, rich coloring and natural expressions free from squinting.

Full front lighting, however, is still a satisfactory prescription for everyday filming with Kodachrome, and we're only discussing full-color filming in this chapter. See pages 94 and 95 for the distinction between Kodachrome and monochrome filming. But "front" lighting is not overhead light produced by a noonday sun. It's rather the light of mid-morning or mid-afternoon playing evenly and fully over all, or most, of your picture area. For truly colorful subjects, this is the best lighting because it makes for the most colorful movies. Yet there are times when sidelighting is helpful.

Beach scenes, for example. You've often heard them described as "colorful." Yet, in distance shots, they are far less colorful than your front lawn. Sand is certainly not as colorful as grass. Swim suits are gay—but at a distance no more so than the nearby blossoms in your garden. You'll find that beach scenes will be better if you move around for sidelighting so that beach umbrellas, bathers, jetties, bathing pavilions, or perhaps even a handy tree or two, throw patches of shade as well as rich color to lend more contrast to your scenes. The technic is equally applicable to this winter's snow scenes.

Even backlighting can be successfully employed with Kodachrome. Just make certain that the camera's lens is in the shade and that you only use this type of lighting on objects near the camera and when there is not



Close-ups . . . *Close-ups* . . . CLOSE-UPS—you can't get too many close-ups. You don't back up to look at subjects and objects in real life. Don't do it with a movie camera, especially with an 8 mm. camera, and particularly with Kodachrome.

much, if any, sky in the field of view. Transparent flowers and fall foliage are exceptionally beautiful when backlighted. And this same lighting is most flattering when used for close-ups of curly-haired relatives and friends.

Fall foliage is a prize Kodachrome subject. Your first temptation will be to get as much of it on the film as possible . . . to stand well back from an especially attractive patch of woods or group of trees so that you can "get it all." But a patch of woods, composed of dozens of trees, and heaven alone knows how many individual leaves, is just a bit too much detail for a tiny film image to magnify many thousand times onto a screen so that the innumerable specks of color will be as clear as you saw them in life.

Make a distance shot of the whole scene, and then move in for individual shots of the more colorful branches. That's the idea of movies, in the final analysis—to tell *all* the story.

All of the foregoing applies to either regular Kodachrome or Type A Kodachrome used outdoors with a Type A Kodachrome Filter for Daylight—which latter is an almost equally effective combination.

Again — Close-Ups!

The two most popular Kodachrome subjects are humans and flowers. The factors that chiefly distinguish one person from another are the features. A moment's mental check-up on your family and friends will substantiate this statement. You don't think of people as full-length figures, but rather you recall the color of their eyes, the presence or lack of laughter wrinkles at the corners of those eyes, the contour of mouth and jaw, and the ease or reluctance of the mouth to break into a ready smile. These are the things that give you insight into the characters of those you know. And these are the things in which your movie audiences will be most interested.

And flowers! You have yet to see garden devotees stand rooted in the center of a garden's loveliness and slowly revolve to admire the many blossoms. Nothing of the sort. There's a moment's pause, then they walk over to some especially attractive blossom to better enjoy its beauty, then to another, and another—and *that* is what your movie camera should likewise do. There are few more beautiful sights than some entrancing blossom reproduced in greatly magnified size on a movie screen as a brilliant and colorful rectangle against the darkened background of one's living room. For truly, if yours is a focusing camera using telephotos permitting extreme close-ups, or a fixed-focus camera fitted with a portrait attachment, you can bring more of the beauty of flowers to your movie audiences than they could enjoy by viewing the actual blooms themselves.

Panoraming, one of the temptations to which movie makers are most susceptible, should be rigidly refrained from in Kodachrome filming. Your subjects are going to be so much more attractive than any you made in black-and-white that it would be shameful to whisk them out of sight by capitulating to the ever present temptation to "fan" the landscape with the camera. And panoraming is actually an unnatural presentation of scenes and subjects. In life you view surrounding objects *individually*—your shoulders and head may pivot, *but your eyes jump the gap between interesting objects.*

By all means film sunsets in Kodachrome. When the sun is above the horizon and veiled by clouds, and when it has just dropped below the horizon and its golden rays are lending enchantment to the clouds above



This Kodachrome illustration is only inches in width. Picture it on a home movie screen several times normal size! Stay up close with a Kodachrome-loaded camera to really appreciate full-color filming.

it, open up your camera wide and you will make movies of indescribable beauty. No definite exposure instructions can be given. Nor need they, because results will generally be excellent. Over- or underexposure will be mirrored largely by the quantity of redness in your films—a quality which can vary widely without affecting the charm of this subject.

Be alert to the obvious reaction of Kodachrome Film to different colors. If your subject is a five-year-old miss attired in a brilliant yellow dress and seated in a white lawn chair, it is quite apparent that you should use from a half to a full stop smaller aperture than you would to film her constant shadow and pet—a coal-black cocker spaniel asleep at her feet on a carpet of rich green grass. Too, a sunlit white-clapboard house will obviously require a smaller diaphragm stop than an ivy-clad brick house filmed under exactly the same light conditions. For the solution to exposure problems nothing more is required than the application of a few known factors. The known factors are general light classifications referring to the type of light falling upon an average movie subject—a figure or two, some lawn, trees, and a bit of sky. When the tonal quality of your subject is noticeably lighter than average, you should stop down. Just how much, depends

upon the brightness of your subject. The Exposure chapter of this book discusses the allowance to be made with black-and-white film for non-average subjects. And this is also true of Kodachrome-filmed subjects—with a few slight distinctions. Pages 17 and 18 tell you of an allowance of two stops for a distant sunlit beach scene—to *f*/16 from an average sunlit lawn exposure of *f*/8, for example. Yet, it is now important to remember that you are dealing with color film. A water and sky shot, being largely blue, registers very fast on unfiltered panchromatic films, but not equally so on Kodachrome, which sees the brilliant blues as you do—*in color*. A half stop allowance for the extra brilliance of the scene would suffice. The more brilliant blues are just that to Kodachrome: more brilliant *colors*—not "whites" as on "Pan" film. But when you are filming real "whites" in color such as sand or snow, normal allowances should be made because very light colors register faster *in color* than brilliant blues or greens. The comparison between the camera's eye (the lens) and your eye as described on pages 14 and 15 is especially true of color film which sees objects exactly as you do.

Kodachrome Filters

Filters play a very unimportant part in the making of outdoor Kodachrome. Only one filter is supplied for outdoor use with regular daylight Kodachrome—the Kodachrome Haze Filter. But this filter is not at all intended to serve Kodachrome Film as the yellow or red haze-clearing filters do black-and-white film. The Kodachrome Haze Filter absorbs only ultra-violet light such as is invisibly present in distant scenics, at high altitudes, and over snow or water. The eye does not perceive this ultra-violet haze—but Kodachrome Film does. Ordinary haze, smoke, and fog are not penetrated by this filter and will be reproduced just as you see them.

There are, however, two other Kodachrome filters. Regular daylight Kodachrome *can* be used indoors with Mazda Photofloods. If used with blue Daylight Photofloods, no filter is necessary. If, however, you use regular Kodachrome with regular Photofloods for making nighttime movies, you must slip a Kodachrome Filter for Photoflood over the camera's lens to color-balance this daylight film for Photoflood use. This latter procedure is not recommended because it slows down the film. And Type A Kodachrome can be used outdoors under daylight when this film, prepared especially for Photoflood light, is corrected for use with daylight by a *Type A Kodachrome Filter for Daylight*, an entirely satisfactory substitute for unfiltered regular Kodachrome.

It is therefore apparent that the average user of Kodachrome need



seldom concern himself with filters. On clear days, distant objects and the horizon of blue sky and white clouds can be reproduced as seen . . . on hazy days Kodachrome will record with habitual realism the hazy aspects of distant objects . . . on cloudy days Kodachrome can do no more than bring to your screen the flat, toneless colors of nature you normally see under such light conditions.

KODACHROME AT NIGHT

Here, again, use of Kodachrome is somewhat different from that of black-and-white film. Suggestions for full-color filming indoors under artificial light and outdoors at night are given in the next chapter which encompasses these subjects. Read first the information given for black-and-white film and then that given for full-color filming after dark.

MOVIES AT NIGHT

MANY movie makers, when purchasing their outfits, do not entertain any filming plans other than those connected with sunlit beaches, lawns, recreation decks, and mountain lakes.

Dawn to dusk, outdoors, has been the filming recipe. But no longer.

Recent advances in film and lighting equipment have thrown open an entirely new world of indoor picture opportunities with either black-and-white or Kodachrome Film for both 8 mm. and 16 mm. cameras.

With Ciné-Kodak Super-XX Film for 16 mm. cameras, for example, it is now possible to make excellent close-ups indoors at night with as little light as that supplied by two ordinary 50-watt Mazda lamps.

Of great benefit, however, for indoor filming are inexpensive Mazda Photoflood lamps, which produce exceptionally "white" light of peculiar photographic effectiveness.

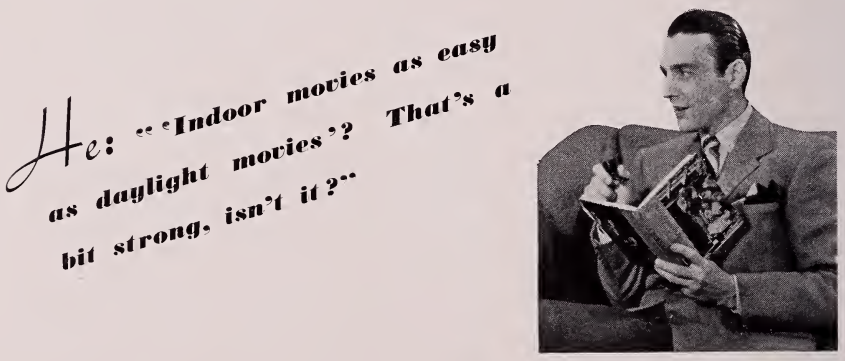
The No. 1 Photoflood has a rated life of two hours, which, if used only when your camera is in operation, should suffice for the exposure of many hundreds of feet of film. The No. 2 Photoflood is twice as brilliant as the No. 1 Photoflood and has a rated life of six hours. Successful indoor movies can be made by merely spotting a few of these lamps about a room; but this, because of the varied distance of individual lights, would create a genuine exposure problem—easily banished by the use of Kodaflector.

A safe light source

Photoflood lamps do not unduly tax the capacity of average home lighting circuits—a circuit, by the way, comprises all of the outlets controlled by a single fuse in your home's fuse box. You can safely use *six* No. 1 Photofloods on a single circuit without danger of "blowing out" an efficient fuse. And *three* No. 2 Photofloods can be used under the same conditions. As either number of lamps in Kodaflector is sufficient to illuminate at least half of an average-sized room when making movies with Super-X "Pan" Film in even an *f*/3.5 camera, it is apparent that these highly efficient lamps, *in Kodaflector*, are truly a practical home movie lighting outfit.

Kodaflector is a twin reflector outfit designed expressly for use with Photoflood lamps—*two* of which, in Kodaflector, are as efficient photographically as *fourteen* used without reflectors at the same distance from your subject. It is extremely light, weighing but five pounds, packs flat in a box of modest proportions, is therefore easily portable, and, even more important, is remarkably low in cost. Five dollars buys a Kodaflector, complete with stand, two reflectors, and 12-foot connecting cords. So great are its benefits when filming indoors that it can be unhesitatingly recommended to every movie maker. And so simple does it make movies indoors that all suggestions for this phase of movie making will be based upon the use of Kodaflector.

In all truth, indoor movies with Ciné-Kodak Films, when Kodaflector supplies the light, are every bit as easy and as certain as shots outdoors in bright sunlight.



Not a bit. The reason is quite obvious—you have but one major factor affecting proper exposure—*the distance from Kodaflector to subject.* The time of the year, of the day, the locale of your shots, the presence of light,



No. 2 Photofloods necessitate the use of easily attached adapters to properly position these larger lamps. Kodaflector adapters are priced at 65 cents the pair, 35 cents, singly.

medium, or heavy clouds in the sky and a proper appraisal of their effect upon exposure—you have taken these outdoor conditions right in your stride and made reel after reel of excellent movies. Then why not indoors, where there are so few variables?

You judge the distance of Kodaflector from subjects, consult the Photoflood side of the exposure card for the Universal Guide (see page 22), set the lens aperture at the point specified by the marker at the right side of the Guide—and shoot.

That's really all there is to successful indoor filming.

Incidentally, indoor exposure instructions are based upon the use of unblackened lamps in undented reflectors. Very old lamps, or very badly battered reflectors, will most certainly supply below-standard illumination.

Some authorities say that it is imperative to bustle about with a tape measure to be certain of the distance from light to subject. This may be debatable. The average person can judge distance with fair accuracy. There's sufficient latitude in Ciné-Kodak Film to take care of the slight variance in exposure which would result from an estimated 6 feet being in actuality but 5½ feet. As you are making movies and not snapshots, it is to be expected and desired that your subject will have at least partial freedom of movement—such as changing position in a chair—which would in itself somewhat nullify the beautiful precision of measured distance. And more than this, if indoor movies really require any such painstaking preparations, you would be justified in flipping the pages of this chapter until you came upon one recognizing the obvious fact that home movies are a pastime and not a profession.

This should not be construed as an endorsement of catch-as-catch-can filming. Common sense, not carelessness, is the proper prescription.

Nor does this dismissal of the inviolability of inches mean that the importance of focusing can be ignored. It is, in fact, highly important that you estimate focus with extreme accuracy—if yours is a focusing camera—when working at the wide apertures and close distances necessary for

indoor filming. Incidentally the distances given on Kodaflector's exposure guide are for lights, *not* camera. Your camera can be either closer or more distant from the subject. More than this, it *should* be at a greater or less distance to escape "flatness" in your film images. Generally, your camera should be trained from a different angle than that of Kodaflector.

This brings us to the matter of lighting, itself. Tomes have been compiled on this subject, showing how, by moving the position of lights, the contours of the face—and even the expression—can be altered. But all this, it is claimed, has no place in How to Make Good Movies. An excellent topic in connection with the making of still camera portraits calling for the "chin-a-little-higher-please—now-hold-it" formula, it seems a bit out of order for the making of bother-free movies of people and pets playing or frolicking about the house.

Yet a few helpful hints can and should be given—and here they are.

The suggestions which follow, incidentally, are for black-and-white film. At the end of this chapter you'll find a department which distinguishes, where necessary, between correct technic for nighttime black-and-white and Kodachrome filming.

Don't play Kodaflector lights upon your subjects from below their eye level. You'll wash out the normal shadows about the eyes and chin. If you are using more than one Kodaflector—and this plan, though not necessary, is recommended for cameras fitted with $f/3.5$ lenses—train their beams upon your subject from slightly to either side of your camera angle. Have one Kodaflector a bit nearer than the other, and judge your exposure from the average distance of both. The same technic can be followed with one Kodaflector by removing one reflector from the stand and operating it from floor, chair, or by hand.

Be certain, when estimating indoor exposure for average shots, that the beams of all reflectors are *superimposed* upon the area you are filming—don't have your lights "wall-eyed," for this does not bring the correct amount of light into play upon your subjects. The word "superimposed," by the way,

Here the beams from Kodaflector's two reflectors are correctly superimposed—on which factor instructions are based.



Guard against underexposure from "wall eyed" lighting. Switch on one light at a time to check alignment. The right reflector is off the target.



does not mean that the center beams of each reflector should be turned right smack on a subject's face. If you are including an area five feet wide, distribute your light evenly over the area. Switch on one of Kodaflector's two reflectors—note where its most brilliant beams hit. Then turn it off, and switch on the other to see that it is covering its share of the picture area. Then turn on the first one, and start filming.

Photofloods not "dangerous" to eyes

New parents among our readers will be glad to learn that there is little scientific foundation for the belief held by many that brilliant Photoflood lamps are harmful to the eyes of infants and children. For, oddly enough, the same people who would not hesitate to expose their children to sunlight for the sake of a picture often balk at the idea of filming them indoors under the beams of Photofloods. Yet an average outdoor sunlight shot would be filmed at *f*/8 or *f*/11, and most indoor movies are made at the far wider apertures of *f*/1.9, *f*/2.8, or *f*/3.5.

What makes Photoflood lamps seem bright is merely the contrast between these photographic lights and the relatively dimmer ordinary room lights for reading. Prove this to yourself by switching on a pair of Photofloods indoors on a sunny day—their illumination will hardly be noticeable. And what leads parents to believe that Photofloods may be harmful is the fact that children blink at them when they are first turned on. So, for that matter, do adults, whose eyes are probably not as "strong."

The trick in using artificial light is to give your subjects an opportunity to get used to it before you commence movie making. Don't "blast" it at them unexpectedly. Turn the lights on a wall for a while, then gradually bring them into play on your youngsters. We think you'll find that they will then face them imperturbably—although, of course, it will be best if your subjects, young or old, do not stare directly at the lights. This, not only because it will be easier for them, but also to assure squint-free and unposed attitudes. Barring true eye weaknesses, in children or adults,

Don't superimpose your lights on the face just because it is most important, or this brighter-than-average area will "wash out"—as at the left, below. Keep them just off the light areas. The right illustration evidences correct, even lighting.





Photoflood lamps are not in the least harmful when used for the brief periods customarily devoted to individual indoor shots.

More for photographic quality than eye safety, therefore, there has been made available a device known as the Kodaflector Diffuser — a 12-inch disk of filtered glass, mounted in a metal rim, which can be attached to the socket in back of the reflectors by means of a bracket and U-shaped rod. It will be found especially helpful in softening light for close-up portrait shots. Its use requires three times normal exposure—a stop and a half.

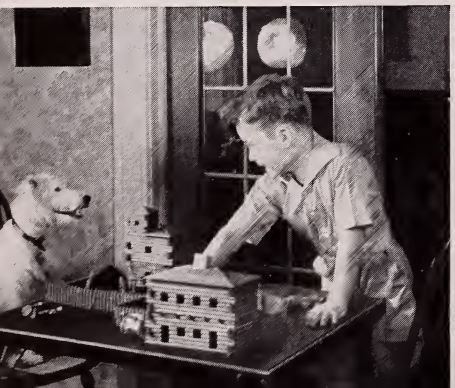
Backlighting with one additional Photoflood lamp in table or floor lamp adds to the attractiveness of most scenes, but does not necessitate any change in exposure because such light is not playing upon your subject from the side viewed by your camera. Nor need an allowance be made if an extra Kodaflector is played upon the background from one side in order to lend good exposure to the entire indoor scene. But guard against any direct light beams entering the camera's lens.

CONTROL BOX

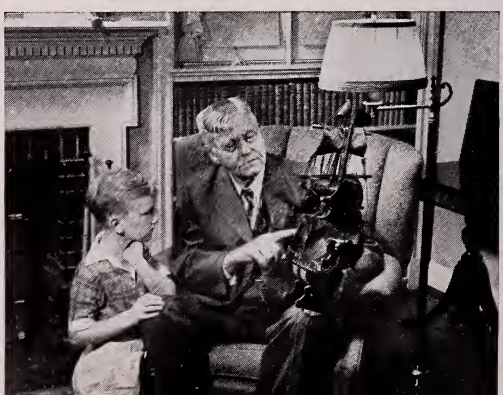
Most cinamateurs will find one twin-reflector Kodaflector sufficient for their indoor movie making. But those who plan to benefit from extra illumination, or who desire semi-professional control of lighting, will welcome the convenience of a little accessory known as the Kodak Control for Photofloods.

Although *six* No. 1 Photofloods can be used on any single lighting circuit without danger of blowing a fuse, and, likewise, *three* No. 2 Photofloods—and although Photofloods will last for months if they are lighted only while your camera is running—the Kodak Control eliminates the need for running connecting cords to several of a room's plug receptacles. It further aids picture making by permitting you to operate Photofloods at reduced voltage between exposures, thereby prolonging lamp life while you are winding your camera or changing the position or composition of

"Don't's" are onerous—but here's one you'll thank us for: Don't permit Kodaflector images to bounce off doors, windows, or mirrors into your camera's lens.

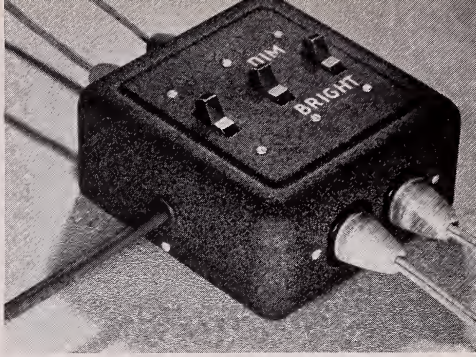


You will frequently find that a few extra floor or table lamps placed to light up the backgrounds of your subjects increases the interest of indoor pictures.





The Kodaflector Diffuser aids in the achievement of desirable soft lighting effects for close-up filming.



The Kodak Control for Photofloods is a convenient, lamp-life-saving switch box for use with from one to four lamps.

your subjects. To use it you merely plug its connecting cord into any outlet for a 100-125-volt A.C. or D.C. power line and establish the Control near your camera for convenient operation. Set the "on-and-off" switch at OFF, the light control switches at DIM. From two to four plugs leading from Photofloods can then be slipped into the Control's sockets. When the "on-and-off" switch is snapped to ON the lamps will be lighted dimly. And when one of the other switches is swung to BRIGHT the lamps connected to one side of the Control will be brightened to full intensity—the others can be brought into play at any desired time by flicking the other switch to BRIGHT.

Allow for the brightness of walls and ceilings

When filming in the brilliant confines of a bathroom, where your subject may be the son and heir churning about the tub, close down a half to a full stop ($f/2.8$ instead of $f/1.9$, for example) to counteract the high light-reflecting surfaces of tile and porcelain.

Attractive semi-silhouette shots can be made at the fireplace by placing one reflector between subjects and fire and blocking it off from the camera's view by one of your human subjects, or by a chair. The other reflector should be used many feet distant across the room for front lighting, and the exposure should be based upon the distance of this second reflector from the subject.

Both of Kodaflector's two reflectors are attached to convenient angle bars with which they are secured to the swivel top of the stand. You will often want to remove one of the reflectors and hold it by the bar to illuminate extreme close-up shots such as of hands, game boards, toys, etc., which permit proximity of light. As you are using but one light, you should again consult your exposure guide and follow its instructions for the use of one lamp.



Those cinamateurs with friends who make "handies" on the screen against the projector's light beams can easily launch a reel of them.

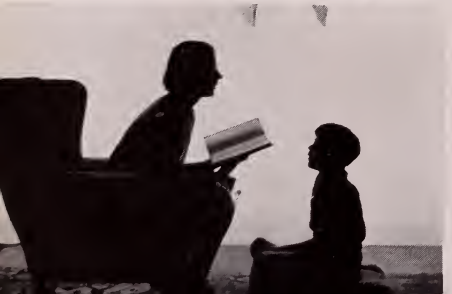


Simple silhouettes like this are just another way of adding novelty and interest to the children's "growing up" reels.



Another "sheet silhouette," this time in a more ambitious manner. It's an interesting way to entertain guests at a holiday party.

This, of course, is a "wall silhouette"—a substitute method for those without wide doorways or archways across which to hang sheets.



SILHOUETTES

The unusualness of silhouettes recommends them to many users of Kodaflectors. Crisp black masses against brilliant white backgrounds, they will invariably win applause from your movie audiences.

Making them is easy.

Let it be supposed that your subject is a very young daughter proud as Punch of her new tea set. You establish her table, tea set, and two chairs directly alongside a hall doorway, then stretch a white sheet, as free as possible from wrinkles, across the doorway beyond her. Your youngster takes her place in one chair, her favorite doll in the other. Eight feet from the opposite side of the sheet place one twin-reflector Kodaflector at the average height of your subject. *Operate your camera from the same side of the sheet as your subject*, and sufficiently far away to include the desired area. Remember — you don't silhouette your daughter and her toys by having them *between* light and sheet. They are on the camera side, and silhouetted *against* the backlighted sheet. With No. 1 Photofloods in Kodaflector use "stop" *f*/5.6 for 16 mm. Super-X "Pan"; between *f*/5.6 and *f*/4 for 8 mm. "Super-X"; *f*/8 for 16 mm. Super-XX "Pan." Your daughter can serve tea to her doll, "feed" her, or read to her from a book — and you'll get a crisp and unusual silhouette movie. The white background of the sheet can be set

off with a few decorative effects to fit the subject. Cardboard cut-outs of nursery rhyme characters if your subject is a child, pumpkin faces and witches riding broomsticks if Hallowe'en, top hats and popping champagne bottles if filming the arrival of guests at a New Year's Eve party—to mention but a few. You need merely pin the decorations to the sheet within the area covered by your camera's lens.

Still another method of achieving the same results, if a convenient doorway and sheet are not at hand, is to establish your subject several feet from an expanse of light colored wall and to place a Kodaflector alongside of, and shielded by, your subject so that the beams from its two reflectors when thrown upon the wall form a brilliant background against which your subject is silhouetted. With No. 1 Photofloods in Kodaflector, for 16 mm. Ciné-Kodak Super-X "Pan" Film, use "stop" $f/8$; with Super-XX, $f/11$; with Ciné-Kodak Eight Super-X "Pan," between $f/8$ and $f/5.6$.

MOVIES INDOORS BY DAYLIGHT

This is going to be very brief.

Movies—excellent ones—can be made by the daylight filtering through windows in rooms and sunporches. But definite exposure instructions cannot be given for them.

The height of shades, thickness and hang of curtains, size of windows, type of outdoor light, time of day, proximity or lack of nearby light-reflecting buildings—all these variable factors have a very definite bearing upon exposure.

This lovely shot was made with a combination of natural light and artificial light—the latter playing upon the near side of the subjects.





A movie screen was used to reflect daylight back upon the shaded side of this youngster's face.

And many splendid shots can be made of subjects framed by a window, and lighted from the camera side by a Kodaflector. But, because more or less daylight will find its way onto the shady side of your subject's face, you cannot follow the regular exposure instructions.

And yet—you will not want to pass such movie opportunities by.

Here are a few hints which *should* result in your obtaining satisfactory movies. But don't follow them for more than one or two shots at first attempt. If they result in good movies—fine. If you obtain slight under- or overexposure, you will know how to counteract it on your next attempt.

If there is a good, strong light (but not direct sunlight) entering a fair-sized window with light drapes, and your subject is directly by the window, you should obtain pleasing results when using 16 mm. Super-X "Pan" at *f*/5.6, or 16 mm. Super-XX "Pan" at between *f*/8 and *f*/11, and Ciné-Kodak Eight Super-X "Pan" between *f*/4 and *f*/5.6. This, of course, calls for you and your camera to be located at the opposite side of the window so that you can film the daylight-lighted side of your subject.

If a daylighted window is the *background* of your subject and you are making movies with the aid of Kodaflector playing upon the room side of your subject, try one stop smaller (*f*/2.8 instead of *f*/1.9, for example) than that called for by the Kodaflector guide for nighttime movies.

All indoor daytime movies, however, as has been said, are somewhat of a gamble. There are so many variables. A far better plan is to either draw the drapes and lower the shades to exclude daylight, or wait until dark. Then, with Kodaflector alone supplying the illumination, you will know *exactly* how much light you are working with, *exactly* what diaphragm stop to use, and *exactly* what your results will be.

Indoor movies are amazingly simple if you eliminate all uncertainties by using a known factor—the light of Photofloods in a $5 Kodaflector.

MOVIES AT NIGHT OUTSIDE THE HOME

Campfire scenes, lighted buildings and monuments, theater districts, illuminated signs and windows, shots by flarelight, lighted fountains,

fireworks displays, athletic contests in brightly lighted halls, rinks and gymnasiums, entertainers on floodlighted stages—all these unusual subjects afford excellent movie-making material for both black-and-white and full-color films.

CAMPFIRES

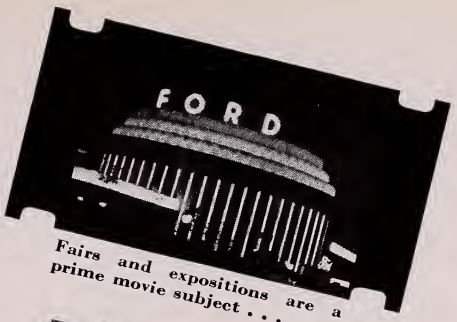
The area throughout which recognizable detail will be recorded in a campfire movie depends upon the widest aperture of your camera's lens, the type of film with which it is loaded, and the brilliance of the flames in your campfire.

If you use an *f*/3.5 lens-equipped camera loaded with regular "Pan" Film to film a somewhat timid fire, all you will get is a few flames licking upwards through black kindling. On the other hand, this same filming equipment will record as much detail when the fire is a roaring blaze as will an *f*/1.9 camera loaded with Super-X or XX "Pan" Film when the fire is anemic.

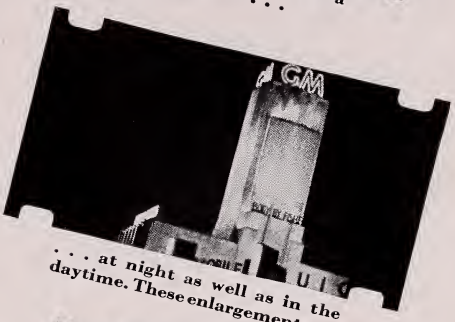
The obvious answer, then, is to build a roaring fire, use the fastest film you can, set your camera at its widest aperture, and shoot. The results, no matter what the scope of the illumination, will be interesting.

LIGHTED BUILDINGS, MONUMENTS, FOUNTAINS

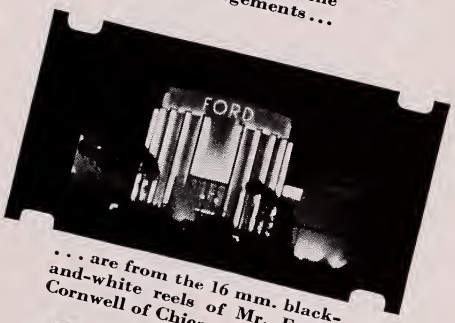
Here, again, no definite instructions can be given—yet very lovely movies can be made with the right equipment, used under the right conditions.



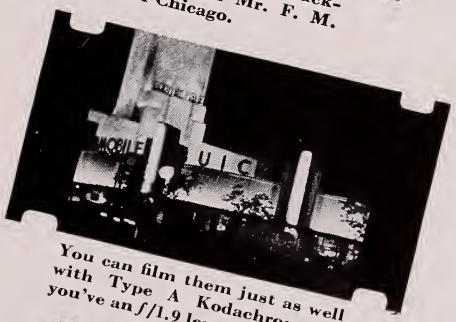
Fairs and expositions are a prime movie subject . . .



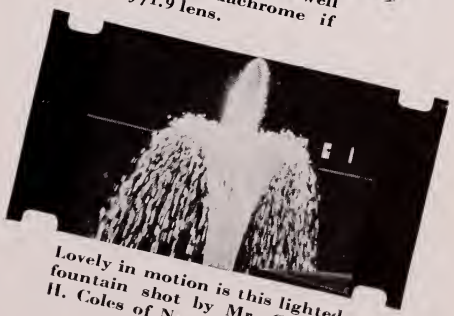
. . . at night as well as in the daytime. These enlargements . . .



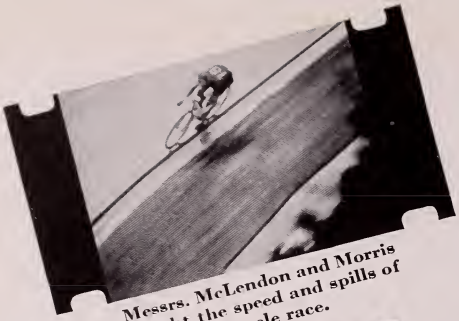
. . . are from the 16 mm. black-and-white reels of Mr. F. M. Cornwell of Chicago.



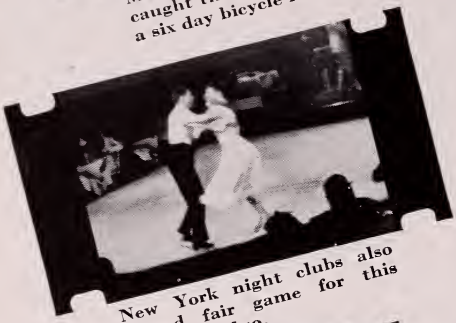
You can film them just as well with Type A Kodachrome if you've an *f*/1.9 lens.



Lovely in motion is this lighted fountain shot by Mr. Charles H. Coles of New York City.



Messrs. McLendon and Morris caught the speed and spills of a six day bicycle race.



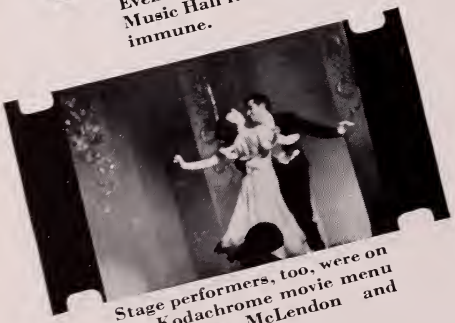
New York night clubs also proved fair game for this ambitious duo.



This "Broadway angel" smiled for the McLendon-Morris camera.



Even the famous Radio City Music Hall Rockettes were not immune.



Stage performers, too, were on the Kodachrome movie menu of Messrs. McLendon and Morris.

He: **"And we thought movie making depended upon sunshine."**



But there are a few known factors. *F*/3.5 cameras should be loaded with Super-XX "Pan" Film and operated at half-speed. If the lights are brilliant, an *f*/1.9 lens-equipped camera should produce successful results at normal speed if loaded with either Super-X or Super-XX "Pan" Film.

In any event, as you will probably not wish to devote more than a few feet of film to novel shots such as these, take a "flyer" if the lights are bright. You'll get *something*. And, as you are seeking an effect and not detail, this "something" will probably prove highly interesting—especially if you have already made a shot or two of the same subject in daylight.

THEATER DISTRICTS

Here, again, is a subject which cameras of different lens speeds, loaded

with film of different speeds, will capture with varying degrees of detail.

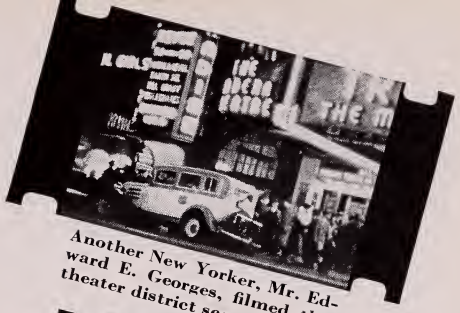
Scenes in brilliantly lighted theater lobbies or under marquees can be produced with startling clarity by $f/1.9$ cameras loaded with either Super-X or Super-XX "Pan" Film, and to a lesser degree by cameras with slower lenses or film.

New York or local "gay white ways" are also prime game for a fast camera lens and film. Rainy nights, when the reflections of sidewalks and streets multiply the number and quantity of lights, offer unusually pleasing effects. And half speed doubles the clarity. Animated electric signs are another excellent subject for fast lenses and film. Shop windows, too—but only for $f/1.9$ lenses and Super-X "Pan" Film or $f/2.8$ lenses and Super-XX "Pan" Film.

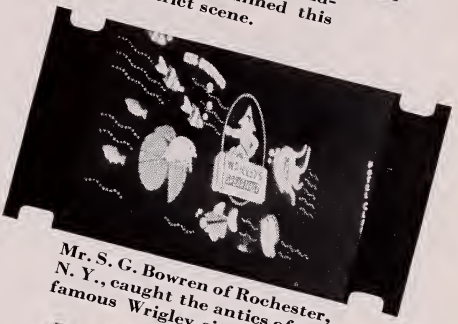
FLARES

There are highly effective magnesium flares on the market with which strikingly beautiful outdoor nighttime effects may be achieved. Set upon an imbedded peg, or wedged between stones, such flares—which have a rated life of 30 seconds, a full minute, or sometimes greater—produce a light sufficiently brilliant for the making of movies with all cameras with lenses of $f/3.5$ speed or faster, loaded with regular, Super-X, or Super-XX "Pan" Film.

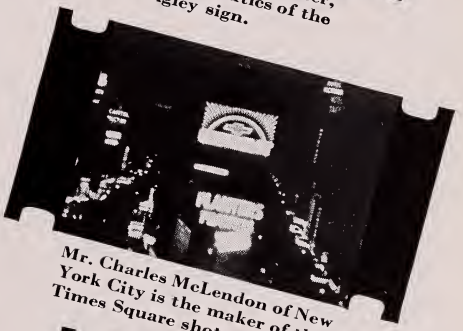
Steak roasts, skating or tobogganing parties—and all outdoor events where the use of flares is possible—are



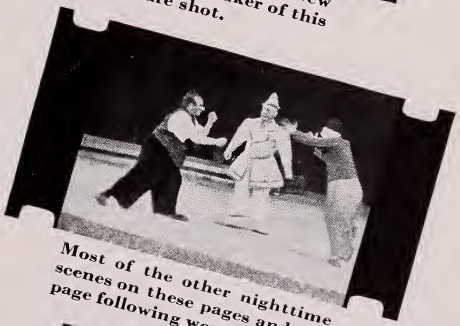
Another New Yorker, Mr. Edward E. Georges, filmed this theater district scene.



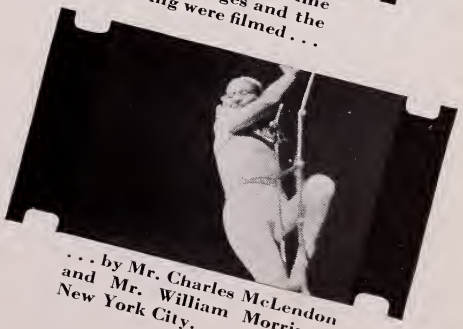
Mr. S. G. Bowren of Rochester, N. Y., caught the antics of the famous Wrigley sign.



Mr. Charles McLendon of New York City is the maker of this Times Square shot.



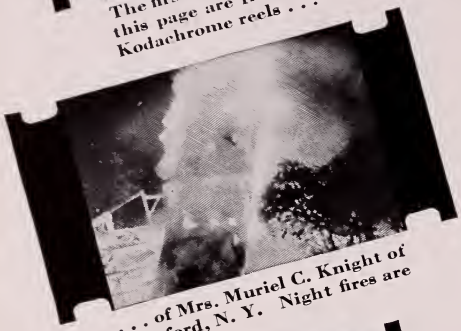
Most of the other nighttime scenes on these pages and the page following were filmed . . .



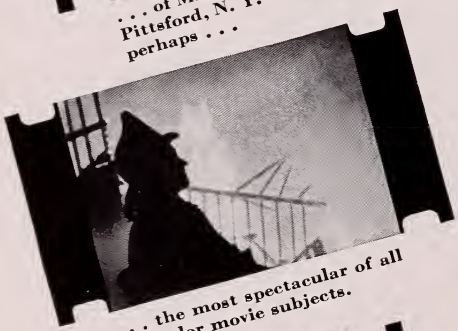
. . . by Mr. Charles McLendon and Mr. William Morris of New York City.



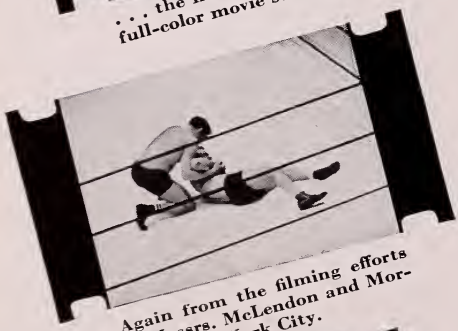
The first three enlargements on this page are from the 16 mm. Kodachrome reels . . .



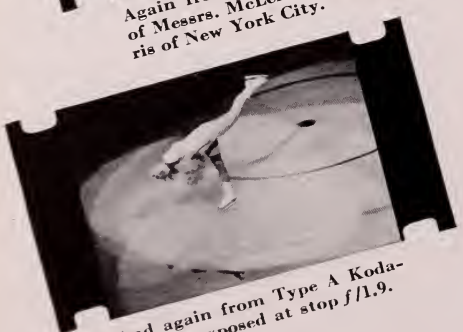
. . . of Mrs. Muriel C. Knight of Pittsford, N. Y. Night fires are perhaps . . .



. . . the most spectacular of all full-color movie subjects.



Again from the filming efforts of Messrs. McLendon and Morris of New York City.



And again from Type A Kodachrome exposed at stop *f*/1.9.

fair game for flare filming. Merely establish the flare so that the camera's lens will be shielded from a direct view of the flare itself, focus your camera before lighting the flare, open the lens to its widest aperture—the more speed and the faster the film, the more you'll get on the film—touch off the flare, and fire away. You'll get movies—and good ones, if your flare is "down wind" so that its smoke doesn't blow into the scene.

FIREWORKS

The delicate tracery of sky rockets, star shells, and aerial bombs, the fuss and fury of pinwheels and "flower pots," brilliant eruptions of Roman candles — here are other excellent opportunities for movie making.

Don't try the distant and delicate subjects unless you've the fastest lenses and films. The more brilliant displays can usually be captured with an *f*/3.5 lens opening and Ciné-Kodak Super-X "Pan" Film; *f*/5.6 with Super-XX "Pan" Film.

Whatever your target and equipment, contrasty shots of night pyrotechnics are the very thing with which to conclude your movie version of the "Fourth," and of carnivals, fairs, and expositions.

Incidentally, don't attempt to film lightning displays with your movie camera. This impressive evidence of nature's fireworks is a split-second affair—so fast, in fact, that you would do well to capture even a trace of it on a single frame of movie film.

FIRES

A regrettable occurrence for those directly involved, fires are nevertheless a legitimately interesting subject for movie makers. And, once more, the brilliance of your projected pictures will be largely dependent upon the lens speed of your camera, the type of film you use, and the brilliance of your fire subjects. Regular "Pan" at *f*/1.9, or "Super-X" and "Super-XX" at *f*/3.5, are usually fast enough.

SPORTS AND SHOWS

With Ciné-Kodak Super-XX "Pan" Film even owners of *f*/3.5 lens-equipped 16 mm. movie cameras can make pictures of such indoor events as wrestling matches, boxing bouts, and spot-lighted actors on a stage. Owners of faster *f*/1.9 lens cameras can, of course, record these events with Ciné-Kodak Super-X "Pan" Film. Super-XX Film users can also expand their *f*/1.9 filming activities to include night basketball and baseball games, track events, hockey games, and aquatic contests in well-lighted pools.

In determining the proper exposure for either Super-X or Super-XX "Pan" you must take into consideration the amount of light illuminating your subjects, their nearness to the lights, as well as the *tone* and *proximity* of walls and ceilings which might reflect light.

Your local dealer, the management of the contests, the local press photographers or newsreel men—from these you should be able to learn of movie possibilities. And, after you have tried a few of these events with a tentative shot or two, you will discover that you will soon be able to judge the photographic effectiveness of existing lights with fair accuracy.

In the larger cities, many theater managers and broadcasting studios have thoughtfully set aside certain nights upon which camera fans are invited to film the doings. Brilliant lights are provided. Boxes and first row seats are the best vantage points, for then no one can bob up in front of your camera or suddenly inject a head or shoulder into your line of fire.

Dawn to dusk has indeed become an outdated plan of filming.

Try nighttime movies, at home or afield—you'll find them a year-round source of interesting film subjects.

She: "When I think of the movies we've missed!"

He: "Forget it. Think of the swell ones we're going to make."





KODACHROME INDOORS

Certainly one of the first and most alluring sources of color pictures is the interior of your home to the tasteful decoration of which you have given so much thought. No handicaps are placed in the path of the Kodachrome devotee. Indoor Kodachrome movies, under artificial light, are every bit as simple to make as indoor black-and-white.

Both regular Kodachrome and Kodachrome, Type A, can be used for making indoor movies. The latter, however, is far more effective.

Regular Kodachrome *can* be used with regular Photofloods if a Kodachrome Filter *for Photofloods* is placed over the camera lens to properly color-balance this film. But the filter slows down the film—and without

Indoor full-color movies are amazingly easy to make because there's only one exposure factor to worry about—the-distance-from-lights-to-subject.

a filter, the pictures will show a predominance of red.

A better plan, when a combination of natural and artificial light is practicable, is to use regular Kodachrome without any filter, and blue *Daylight* Photofloods instead of regular Photofloods.

However, the ideal combination for nighttime indoor filming with either 8 mm. or 16 mm. cameras is Ciné-Kodak Kodachrome, Type A, Film and regular Photofloods in Kodaflector.

The exposure cards supplied with each camera equipped with a Universal Guide, or the exposure instructions attached to Kodaflector, will dispel any exposure problems for making indoor pictures with Kodachrome and assure you of consistently pleasing results.

One point is most important! *Do not allow any daylight to enter the room in which you are using Kodachrome, Type A, and regular Photofloods.* Color-balanced for the light of Photoflood lamps, Type A Kodachrome quite naturally reproduces all objects touched with daylight in tones of a most decided blue. If you use this film indoors during the day draw all shades and curtains, and use Kodaflector and Mazda Photoflood lamps, alone, for illumination.

But, this does not mean that you cannot make movies out of doors in sunlight if your camera is loaded with Kodachrome, Type A. To return the color balance of Type A Kodachrome to that of regular Kodachrome, a *Type A Kodachrome Filter for Daylight* has been introduced which enables this nighttime film to reproduce daytime subjects in colors as effectively as regular Kodachrome. And at the same diaphragm stops.

OUTDOOR KODACHROME AT NIGHT

Many of the suggestions listed farther forward in this chapter for black-and-white filming outdoors at night are equally applicable to the use of Kodachrome, Type A, and the full-color results will be far more beautiful when screened.

To take the subjects in the same order in which they have been presented for black-and-white filming:

Campfire films can be made in full color every bit as successfully as in black-and-white, and certainly they'll be far more realistic. If your camera happens to be loaded with regular Kodachrome—use it. The flames will merely appear ruddier than with Type A.

Illuminated buildings, monuments, and fountains are an extremely doubtful source of picture subjects for full-color filming. But if the illumi-

nation is unusually bright . . . if your camera is equipped with an $f/1.9$ lens . . . if it likewise has a half-speed device—full-color pictures are entirely possible.

An emphatic "Yes" is the answer to the question of success in the full-color filming of brilliant and colorful advertising signs. You will not obtain underexposure if you film them at regular speed at $f/2.7$ with Type A Kodachrome. When lighted streets, and not individual signs, are your target, use $f/1.9$—and half-speed if you wish.

For flare-light scenes the answer is again "Yes." The results obtained with Kodachrome, "regular," or Type A, will encompass a range of detail quite comparable to that of Ciné-Kodak black-and-white films, yet far surpassing them in realism.

Fireworks are another splendid source of movie material at $f/1.9$. It's safe to say that any display that can be filmed on Super-X "Pan" Film will equal in detail and be far more beautiful if filmed with Kodachrome, Type A. And what is true of fireworks is true of fires. Often appalling, but nevertheless highly interesting — a night blaze is prime material for movie cameras loaded with Kodachrome, Type A,

Such subjects as well-lighted street scenes, animated electric signs, and theatre marquees are all within the range of $f/1.9$ lens-equipped home movie cameras and Kodachrome, Type A.



and operated at their widest aperture. Regular Kodachrome is almost equally useful.

Sports and shows will not be the fertile source of subjects for Kodachrome, Type A, that they are with Super-X and Super-XX "Pan." The reason is quite apparent. In outdoor flare-light shots, for example, the full-color filmer quite naturally expects movie images ranging from overexposure on objects nearest to the flare to almost total opaqueness on objects any great distance from the flare. The screen images are nevertheless brilliant and colorful. But indoor shots made of a hockey game have an entirely different type of illumination—general, and not concentrated. Filmed with Super-X "Pan" or Super-XX "Pan," the results will, in most instances, not compare at all in snap and clarity with a black-and-white record of a hockey game made at an outdoor rink. Nevertheless, it will be a film record of a hockey game and therefore exciting, even if a bit underexposed. But underexposure with this same subject in color filming results in something more than merely an excusable absence of complete detail. It results in faulty coloring because underexposure with Kodachrome is evidenced by far deeper shades of true colors.

But all nighttime sports are not beyond the pale.

Wrestling bouts, for example, for which the lighting is not only intense but almost always concentrated directly above the ring, may be filmed with Kodachrome, Type A, at camera apertures ranging from *f*/3.5 to *f*/1.9 —the choice of aperture, of course, depending upon the quantity of light in the particular arena before your camera.

He: "Does that give me an idea! I'm taking our camera to the boxing bouts at the club next week."



Movies of stage shows, too, are within the range of *f*/1.9 cameras loaded with Kodachrome, Type A—but only when the spotlights are turned upon the actors.



In short, nighttime color filming outside the home requires a fast lens and should only be attempted with brilliantly illuminated subjects. After a little experience in this field good results will be the rule rather than the exception—you'll get some of the finest and most interesting pictures of your movie collection.

TRICK SHOTS

THIS chapter is approached with extreme diffidence. There are countless cinematic tricks within the range of amateur movie-making ability and the average amateur movie camera. Were they all to be listed and described in this book, you would have to find new space for your five foot shelf of classics—and many movie makers, who can take their trick shots or leave them alone, would flip these pages by the fistful.

On the other hand, if it is assumed that trick shots are *not* within the province of How to Make Good Movies, there will be many other readers of this book who will, to say the least, drop it from their "Required Reading" list.

Cinematic purists insist that trick shots should be seen and not heard—that they should seem real and not tricks . . . should always serve the story, and not the story the tricks. Certainly there are few things more annoying than the works of a cinamateur who insists on jamming his reels with jarring and unnecessary bits of cinematic sleight-of-hand. Yet, if a non-professional point of view is taken of the matter, trick shots can be regarded in the light of good clean fun and popped into films every now and then as condiments—somewhat with the same spirit that prompts you to rub a bit of garlic on the inside of a salad bowl.

In any event, the contention is made that there is a real place in home movies for trick shots. There follows, therefore, a not inconsiderable number of pages devoted to those trick shots which are relatively easy to make, seem assured of a useful place in the reels of the average filmer and of receiving an enthusiastic hand from those who make up your movie audiences. All of these film stunts will, as far as is possible, be illustrated so that you can, if interested, attempt them with every assurance of success. Certainly they should add considerably to the humor and interest of your movie shows.



She: "M'm'm—you'd better read this. I'm afraid trick shots will be a bit over my head."

He: "Shouldn't be. It's all easy when you know how."

EFFECTS WITH CAMERA SPEEDS

Many cameras have half-speed features. Still others boast of slow-motion devices. Although the outstanding virtue of the former may be its ability to offset poor light conditions, and of the latter to film objects in slowed tempo for more careful analysis, both can be used for trick effects.

But first a caution on exposure. Each change in diaphragm stops halves or doubles exposure. If *f*/8 is the correct opening for a shot at the standard speed of 16 frames per second, a camera operated at half-speed—hence giving each scene double the usual exposure time—should be set at *f*/11.

Half-speed movies can be made of crowded corners, busy harbors and railroad terminals, and of any and all subjects which, given doubled screen impetus, become more exciting or amusing. Half-speed movies of gay white ways at night not only add zip to an exciting spectacle, but also increase the number and clarity of objects recorded. Tumbled cloud effects parading past a foreground of hills—here is another subject in which you can emphasize motion by operating the camera at half speed.

And, if there are many occasions upon which half speed can be used to advantage, there are far more suggesting the use of slow motion.

Immensely amusing effects are obtained of all slow-moving subjects when their leisurely pace is under-scored by slow-motion filming. Perhaps

You can double the screen speed of a busy crossing by filming at half speed . . .



. . . a device equally effective for heightening the pace of clouds rising over a hilltop.





Filmed at normal speed, a diver is off a springboard and into the water before you can say how-to-make-good-movies. Mr. Hamilton Jones of Buffalo, N. Y., wisely filmed this diver at 64 frames per second—quadrupling the scene's screen time and interest.

one of your picnic party may be pursued by a friendly but terrifying cow. If the cow is filmed at half-speed to accentuate her progress, and the escaping picnicker shot at slow motion to stress her own impression of her progress, the sequence will be doubly entertaining on the screen.

Divers, hurdlers, ski jumpers—here are three subjects of the sport world heightened in interest when occasionally depicted in slow motion. The form of golfers and tennis players is clearly exemplified in slow-motion analysis. The delicate tracery of cascades, the thunderous majesty of cataracts—here are two more opportunities for heightened interest from slow motion.

With Ciné-Kodak Super-XX "Pan" Film it is even possible to shoot slow motion black-and-white movies of performers in the spotlight on a stage or wrestlers in action in a well-lighted ring.

Every day there is some subject, or some phase of a subject, which can probably be made more interesting, more amusing, or more dramatic, by the use of non-standard camera speeds. Yet these do not really call for cinematic trickery.

In this exposition of trick shots a classification will be made by methods rather than by effects. And the first and undoubtedly the easiest method is that known as Stop-Motion.

STOP-MOTION FILMING

This altogether simple and popular bit of trick filming consists solely of operating the camera from some steady support, suddenly stopping the action in front of the camera, having some change made in part of the scene before you, and then having the action resume together with the filming. This, in general, is the practice of stop-motion filming, although there are almost endless variations. But one phase of it never changes—*the steady support*, whether it be tripod, wall, or convenient table.

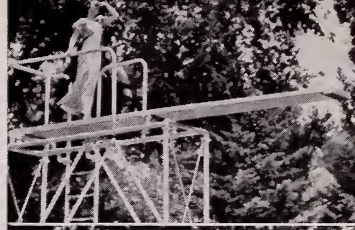
For example—you might be making a reel by a swimming pool. In a series of varied length shots of a young lady and her companions you convey her crystallizing intention of joining them in the fun they are having in bounding off a springboard into the water. The very evident hitch in the proceedings is the fact that they are attired in swimming suits and she is in a frilly and voluminous frock. She daintily touches her bedewed face with a handkerchief, sets her dimpled chin determinedly, rises, and, striding to the beginning of the springboard, signifies that she, dress or no dress, is going to join in the fun. Up until this point your camera can be hand-held at a variety of angles and distances—but now you establish it securely at one side to include the full length of the springboard. Your

heroine, assuming that she knows something of diving and the habits of springboards, takes the two or three necessary mincing forward steps that bring her one jump from the downward pressure of the board that is to fling her, gown and all, into the briny deep—and lo, and behold, she rises from the board, safe and trim in a swimming suit!

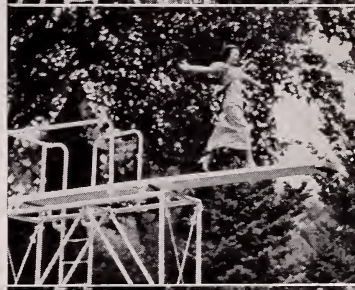
How? It's easy

At the point when she "hits" the board you simply stop filming. She abandons her attempt to ruin a perfectly good dress, scampers back to the locker room and climbs into her suit, returns to the springboard, you again start your camera, and she not only starts her dive, but completes it. Your film, obviously, will have to be trimmed a bit on the second shot so that your splice will come at the exact moment when she "hit" the board in unconventional diving attire—unless you are able to recommence filming at the very spot and instant of her initial "hit." This, if possible, is a better plan, because it avoids the need for a splice, which, unless you "dupe" the combined scenes, is likely to destroy some of the inexplicableness of the stunt by introducing a slight jump on the screen as the splice passes through the projector gate.

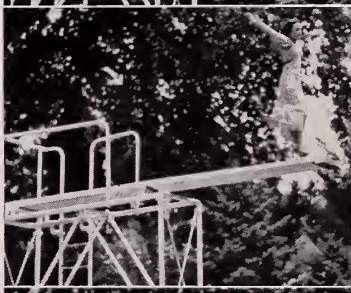
That's one way to use stop-motion—the "change of attire idea," you might call it. Certainly here is one way to put a laugh in your diving picture.



Good grief — What's she doing on a high board in that costume!



She's not going to ruin that lovely dress by jumping in. . . .



. . . For Pete's sake—she *is!*



Well, I'm hanged. How did you ever work it?



As easy as that, eh? Lucky thing that girl didn't lose her balance the first time. P. S. Our model did. In she went—dress and all! Advise *your* subject not to wear high heels.





Pretty small barrel for a boy that size.



Easy, now. Such things just don't happen.



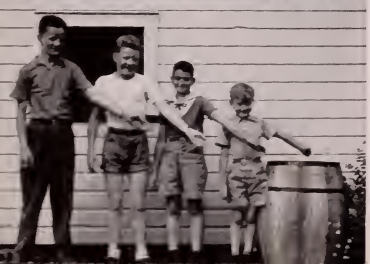
H'm. There's something funny going on here, but I don't . . .



Just what I was afraid of! The poor boy is probably crushed . . .



I give up—how's this one done?



And I thought it took a gadgety camera to do tricks!

Other filmers fancy this same ruse for introducing groups. For example—the first glimpse of your subjects shows but one of them. This individual beams at the camera momentarily, turns to one side and thrusts out his hand in welcome. Here you stop the camera, have your second subject take his place alongside the first, recommence filming as the second subject grasps the hand of your original subject. The second then gives the camera his very best smile, turns, and by the same technic, introduces your third subject. Etc., etc. This type of stop-motion filming is quite interesting on the screen. But keep this point in mind: Before you start filming make certain that your camera is at a sufficient distance from your subjects so that you will be able to include the completed group without having to change the angle of the camera.

Perhaps your subjects are a group of children. And perhaps, too, there is a nice, clean barrel at hand. Have one child at a time climb into the barrel and then smilingly pop out of it. You film them only as they come out—but your movie audiences will marvel at the capacity of that barrel.

Too, if you are one of those who have always envied those of your friends who have developed some skill at legerdemain, stop-motion filming is your chance to show them that more things than rabbits can be made to appear from hats.

Still another application of stop-

motion is to lend unnatural and amusing action to commonplace subjects such as crowds scurrying across busy intersections. You can indicate heightened speed by filming them at half speed, but you can introduce a note of sheer panic by flicking the exposure lever once every second or so. The same impetus can be given to a sedate ferry boat churning its dignified way through a maze of river or harbor traffic. By flicking the exposure lever you can give to your subject the spryness of a startled water bug.

He: "This flicking the exposure lever is a good stunt, too. But how can we use it?"

She: "I know. I'll film you pushing the lawn mower about—bet we can knock a half hour off your best time."



Truly, there are almost endless variations of the stop-motion theme. Generally you will merely put it to work to provide a novel touch to some sequence of your friends. Often it will come in handy as a "bit" in some play you are filming. You can, in fact, build up an entire playlet from it. One such appears in the "Play Making" chapter of this book. It's entitled *Vanishing Cream.*

Just one point more on stop-motion. With some cameras, particularly when they are not fully wound, a bit of overexposure will occur in the first two or three frames of each scene as the camera motor gathers headway. If these prove annoying, cut them out, draw the ends together, and splice. But if you adopt this plan, you may want to duplicate the sequence to avoid possible splice jumps on the screen. You'll find information about film duplication on page 210.

As with all the applications given here on trick shots, these on stop-motion filming are merely hints. Many can be used in combination. The frequency and range they attain in your films depend entirely upon your desires and imagination.



This shot was made with the camera right side up.



And here is the final stage of an upside down shot —when reversed, of course, it appears up front in the sequence.



The youthful magician actually pushed the bicycle from him, but here it appears to rise from the ground.



And then gallops right over to his waiting arms. Now the camera is righted for the last shot.



With an airy wave, our talented youth climbs on his steed and pedals from sight.

UPSIDE-DOWN FILMING

This ruse is used almost entirely to bring reverse action to a scene. You've seen its most popular application time and time again in the sequences of divers who emerge feet first from the water to alight gracefully on the tip of a springboard and stride backwards to safety. All that you need do to duplicate this is to invert your camera —it's not difficult to operate from this position—and film your diver as he makes a normal dive. Then, when your reel has been returned from the processing station, turn this scene around end for end, and splice it back into the reel.

In some uses of reverse action it will be important that your subjects appear in correct order from left to right, such as, for example, if it is your plan to first film the action right side up and then upside down and reverse it end for end. This need not concern you if you operate a 16 mm. camera. Merely keep the same side of the film facing you as you spin the inverted strip about to make your splices. But with 8 mm. film—which you not only have to turn around, but also *over* so as to return the perforations to the right side—objects will be reversed from left to right in relation to preceding or succeeding scenes which are filmed with the camera right side up. For this reason, and also because a focusing problem is created when some scenes are flipped over, reverse action or upside-down filming is not recommended for 8 mm. movies.

Another popular occasion for reverse action is to show people plucking things out of the air. With a straight-armed toss, upward and outward from the hips, objects can be flung the necessary few feet without undue effort. Filmed upside down, and the scene reversed, such objects will appear to leap through the air into one's hands—which technic, if the object happens to be a vase of flowers and your subject concludes his upward swing with a flat, upward-faced palm, will appear a rather neat trick indeed. In view of the fact that what he actually does is to throw the vase, it is suggested that he use one of those old, cracked vases which are generally to be found on upper pantry shelves. And it might be just as well to decide whether or not you want it to be filled with water. If it *isn't*, some hardy soul can very well take his position outside the field of view to catch the antique. If it *is* to appear brimming full with water, the best thing to do is to steel your nerves and have your model chuck it into oblivion.

Some movie makers report excellent comedy results in upside-down filming by using it for little movie skits such as of the young wife for whom just *nothing* goes right in the kitchen—egg yolks, for example, returning to their unshattered status despite a vigorous application of an eggbeater.

He: **"Something about this upside-down filming idea tells me you're going to be the star of our next movie."**



Fishermen, who have been known to perpetrate the most shameless alibis and hoaxes to explain their empty creels, might be intrigued by the following inverted camera sequence. The cast calls for one fisherman, and one fish of respectable size which *has* been caught. Here's the scenario as it should be *filmed:* The fisherman lies exhausted in the bottom of the boat . . . slowly assumes vertical position . . . methodically beats the helpless fish on the boat bottom . . . suddenly picks it up, dumps it in a landing net,

and, with a backward sweep, returns it to the briny (or, more likely, fresh water) deep . . . seizes his fishing rod by grip and reel, and with much grimacing and heaving and ho'ing, appears to be trying to pull the bottom out of the lake. You can apply reverse English to this yourself to see how it would appear on the screen. Even if it does appear a bit fishy (no pun intended) it will certainly be amusing. Important to keep in mind in all reverse action filming is the absolute necessity of doing everything *backwards* while being filmed.

Other movie makers, once they get somewhat worked up about the possibilities of the reverse-action idea, will see to it that they are present with their cameras when some tall chimney is pulled down or the side of a mountain blasted into smithereens. The trouble with spectacular events like these is that it's really a shame to confine your filming of them to a comedy version. Another trouble is that they are over and done with so soon. Wise movie makers will invite a fellow cameraman along, have him film the event right side up while they film it upside-down, and later have a dupe made of the right-side-up shot. Then, when you screen the spectacle and your audiences sigh regretfully at the brevity of the destruction, you can obligingly have the shattered remains leap upwards into their original whole and re-destroy them for your friends' edification.

A prime ruse for comedy effects

The same technic can be used to bestow unquestioned heroism upon a comedy's masculine lead. The train rushes down upon the unseen heroine, previously seen strapped to the track (some nice, unused switch) by a be-mustached villain. Then a shot of the struggling heroine—minus the train, of course. Then the on-rushing train—still nearer. Then the heroine's face, contorted with the highest calibre anguish. Then our hero galloping recklessly across some untenanted tracks. Then the train. Then the heroine. Again the hero—standing with hand outstretched in majestic command alongside the hapless heroine. The train (or a similar train) backs briskly away from our masterful male. All shots should be made with the camera right side up with the exception of the last which should be filmed with the camera inverted as our hero stands safely to one side of the track and holds up his hand in greeting to the passing engineer. This scene, reversed end for end in the reel, will earn a laurel wreath for even the most timid male. The earlier shots of the train are of just any train, any place—the magic of movies and a splicing block make it possible to blend together shots widely dissociated in time and locale.

Too, there is the popular ruse of upside-down filming from the back

platforms of trains, which is recommended for those who don't care where they are going but want to see where they have been. Besides, when reversed, many among your audiences will give you credit for having straddled the engine's cowcatcher for the sake of a good picture. That is, many of them will if you take the trouble to have two right-side-up shots made of yourself clambering on an engine cowcatcher, camera in hand, and waving goodbye to another camera that records you in the act, and then another shot, made from a different angle, of you climbing off that same cowcatcher after you have appropriately ruffled your hair and attire; the first shot to precede that back-platform shot, the latter to follow it. You needn't involve yourself in really serious difficulties by trying to make these two shots at the main depot in your home town. A moment's retrospection will probably suggest to you the location of some harmless old locomotive, one jump from the junk heap, on a freight yard switch, which, if you get close enough to it with the taking camera, will prove sufficiently convincing when screened—particularly if you attempt the idea on a windy day and have your fellow cameraman get down low with his camera so that there is only a background of sky to set off your wind-tossed locks and devil-may-care expression.

This very same use of upside-down filming suggests itself to those who would rather film an arrival by boat, car, train, or plane, than their departure—but who forgot to film their arrival when they actually arrived. This is not as complicated as it sounds. The technic is to invert the camera when filming your departure and then reverse the film.



She: **"Oh, darn! We could have used this upside-down filming idea just perfectly for our Washington trip last month."**



What the deuce do you suppose this lad is up to?



If he thinks he can get up on that wall he's certainly due for some barked shins.



S-a-y — that lad can jump at that, but he'll never . . .



. . . Don't look now, but I think he's going to break his neck.



Wow! He must be half mountain goat.



Now how in blazes did you make *that* one? H'm—you don't know whom to trust these days.

And then there is the high jumping application of reverse action. The idea is to establish your camera on some rigid support and make two shots of your spring-footed model jumping off the top of a wall so that on the screen he will appear to have jumped entirely over the wall. People can jump *off* higher things than they can jump *over*. Rig your camera at a forty-five degree angle from a wall or fence somewhat higher than your hero's height. First, have him climb up, mark the position of his feet, and then, after you have started your camera, have him jump upward and forward from the top. This shot you make with the camera right side up. Your model again takes his position on the wall or fence, facing the same direction, but this time he jumps upward and backward from the wall—and you film him with the camera inverted. After he lands he should take one two-footed jump rearward and then run backward out of the scene. When this last scene is reversed in the reel, and the two are spliced at the point where they best match, your hero will apparently take a running jump right over the obstacle.

This idea is really worth more than one sequence. Many movie makers have built up entire comedy reels from it—the slothful individual, child, or adult, who, after one yeast cake or other stimulant, proceeds to bound about the landscape and over obstacles like a terrified kangaroo.

Yes indeed—upside-down filming

is a gold mine of ideas for the trick shot devotee. There's a little skit based on it entitled "The Nervous Wreck" in the Play Making section of this book.

Here's one final employment of this ruse—the knife-throwing sequence. Everyone has shuddered with tenth row safety as the vaudeville or circus knife-thrower neatly silhouetted his comely stooge with glittering blades. You can do an altogether realistic bit of knife throwing right on your movie screen by means of a set of knives, some strong black thread or fine black wire, and upside-down filming. You first place your victim against the board fence, or tree, stick the knives all about her



He: "M'm."

She: "Oh, no you don't. I'll be the knife thrower if we do this stunt."

. . . fasten lengths of thread to the handles of the knives and then make a series of upside-down shots as each knife is given a slight tug to produce the correct after-quiver and then yanked from view. Intersperse these with an occasional heart-rending view of your victim's quivering countenance. Nicely spaced throughout this reversed sequence, splice in a few shots, made right side up, of you throwing knives, the camera knows not where. Properly edited, "duped" to eradicate possible splice jumps, this little cinematic bit, if you avoid any halation from the connecting threads or wire, should send your movie audiences home with the proper respect for your moods and prowess.

ROCKING AND SPINNING THE CAMERA

Those who put the achievement of unusual effects above the feelings of their audiences should be able to create a nice sensation of mal de mer by slowly rocking the camera from side to side in unison with their human



Hold her, New't! You know just how he feels after a round trip on the roller coaster.

subjects. The net result is that these same human subjects do not appear to rock at all—but everything else in view of the camera does. It's a nice bit for a "My-world-is-crumbling-about-me" sequence in a tear-jerking drama, or a "Something-I-ate-no-doubt" bit in a comedy.

A single slow revolution of the camera will likewise result in many an appreciative laugh from your audiences. A good subject is a bit of snow or sand upon which a youngster is crawling on all fours. Glue your eye to the finder, and, after the child has crawled a few feet, slowly make one complete turn of the camera by grasping it by the fingertips at the rear and lens barrel. The youngster, if you frame him properly, will appear to crawl entirely around the frame of the screen.

But this stunt has more uses than this.

You can take your stance within a relatively few feet of a grounded airplane at your local airport, and, by shooting from a low camera angle to eliminate any view of the ground, make a revolving shot of it that will be a fairly creditable loop-the-loop. Or, if you take the trouble to rig up a device to hold your camera, you can invent new dives for timid friends to do by merely filming them as they *jump* off diving towers.

"DOLLY" SHOTS

A "dolly," in Hollywood parlance, is a mobile truck to transport cameraman, director, and kindred souls so that they can approach, withdraw, or follow the action they are filming. Because they have to carry a consider-

At the left, below, you see the Tripod Truck being used for a "dolly" shot. At its right the head of the house retreats on an express wagon before his advancing daughter.





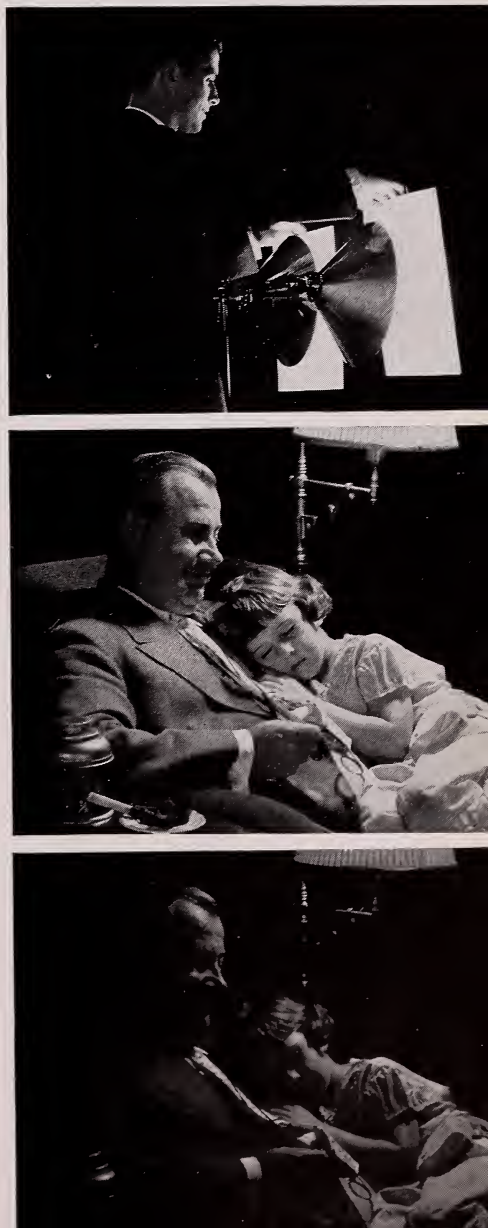
able burden, must furthermore be noiseless in operation, professional dollies cost considerable money. The Tripod Truck supplied for the Ciné-Kodak Tripod largely eliminates the complaint of excessive expense for those who desire a mobile camera support. Too, as long as most amateur movies are silent and children have express wagons, there is certainly no reason why you and your camera cannot be pushed or pulled about your home to retreat from, or follow, a chubby and toddling youngster, or the son and heir proudly pumping his new tricycle up the front walk. They're different from the run-of-the-mill shots. And because they're different, they're more interesting.

FADES

Strictly speaking, fades are not trick shots. They are special effects largely beyond the abilities of the average home movie camera. For cinematic touches such as these the advanced filmer is advised to consider the many unique advantages of the super versatile Ciné-Kodak Special—a 16 mm. camera built expressly to make fades, dissolves, double and multiple exposures, mask shots, and the like, as easy and as certain as the everyday shots that are part and parcel of every movie maker's library.

Yet passable fades can be made by the average movie camera. But first off, let's see if you really want to make them. Special effects, similar to trick shots, can be overdone.

Some movie makers confuse fades with dissolves. A fade is the gradual appearance or disappearance of a scene. A dissolve is a combination of a fade-out and a fade-in—



When you gradually blank out the light, as shown at the top, you'll produce a fade out effect such as is shown in the other two illustrations.

one scene blends into another. A dissolve is a smoother method by which to carry the eye and mind from one phase of a subject to another phase of the *same* subject. A fade-out should be used to indicate the ending of a series of shots of one subject, and a fade-in to introduce a new subject. A fade-out can also be used to indicate a lapse of time—the tempo and length of the fade being indicative of the length of time intervening between the occurrence of the action in the faded-out shot and that of the succeeding shot.

So—unless your subject warrants the use of fades, you had better forget them.

But this is how you can simulate a fade-out or fade-in with your camera, regardless.

If you are filming indoors with artificial light, simply cut down on your light until there is not enough left playing upon your subjects for them to be recorded. Reversal of this method fades in a scene. The technic is obvious. Have an assistant or assistants draw opaque cards across the faces of Kodaflector's reflectors.



Another method of fading, or "wiping out," scenes in the home—just close the door. You can use it for many of your indoor sequences.

FADES WITH DOORS

This is an unusually pleasing ruse, if your indoor filming is likely to take you into several rooms in your home. Establish your camera in the hallways for all shots so that they just include a bit of the door frame. Then, when your sequence for each room is finished, have someone slowly close the door—your next shot being "faded-in" by having an assistant slowly open the door into the second room in which you plan to film action. It's simple and effective.

FADES WITH A TITLER

We are getting a bit ahead of our story here, as we have not yet described the versatility of the inexpensive Ciné-Kodak Titler. Suffice it to say at

this point that the Titler has an auxiliary lens that brings the camera's standard lens into focus on a title card placed in an easel some 7 inches distant. Many movie makers have found that this easel can be used for other things than holding title cards. When, for example, the auxiliary lens is folded out of the way, you can focus directly through the open back of the Titler's easel and fade out a subject, with a technic known in professional filmdom as a "wipe," by gradually sliding a bit of cardboard or rigid paper upwards, downwards, or from left to right across the back of the easel. This material, of course, is going to be out of focus—but if you use plain, dull-black board, so much the better. Quite pleasing is the plan of using holiday wrapping paper of minute pattern pasted on cardboard to fade in your Christmas Kodachrome movies and another piece to fade them out. Its design will not be sharp, but it should be recognizable.

FADES WITH CAMERA DIAPHRAGM

This substitute method for making fades is, frankly, more practical in theory than in practice. If, for example, you are filming under *f*/5.6 or *f*/8 light and attempt to fade out a scene by darkening it with underexposure by slowly turning the lens diaphragm down to its limit—*f*/16—you will probably only achieve a lasting respect for the latitude of Ciné-Kodak Film and the corrective properties of Eastman processing. See page 32. But if you are filming under poor light conditions at apertures of *f*/3.5 or larger, closing down to *f*/16 will eliminate considerable detail, though fall far short of being a true fade.

HOCUS FOCUS

Here's a little used idea that deserves prominence.

By deliberately throwing your camera out of focus, and then back in focus on the next scene, you can, in effect, achieve much of the attractiveness of a dissolve. And it's entirely easy to do—you change from correct focus down to the minimum focusing distance of your camera. If this minimum is two feet, so much the better. Don't try to throw a close-up out of focus by changing to infinity—it doesn't work out too well.

Here's a typical application: A sharply-focused shot of a distant drifting canoe carrying an indistinguishable couple—focus slowly down to two feet; then with the camera nearer to your subjects bring them slowly back into focus, then defocus; now, up quite close for a recognizable shot of the girl and boy in the canoe—again bring your camera's lens back into focus.

Try this ruse on a series of related scenes. You'll like it.

There are more than a few movie makers who bewail the fact that there



are no diffusion disks supplied for their movie cameras. Diffusion disks for snapshot cameras are, as you probably know, rather large bits of transparent glass with a series of embossed circles which make it impossible for the lens to register its customary sharp image. The resultant soft, diffused effect is held in high regard by many picture makers.

But a Ciné-Kodak lens is not a snapshot camera lens. It has to be a very small lens to register a very small image on a very small bit of film. Which explains why there are no diffusion disks for Ciné-Kodaks.

Yet soft effects, while perhaps not true diffusion, are easy to obtain. The trick is to go out of focus—not just a bit, but way out. When a scene is just a little bit out of focus it is obviously just that. But when you are making a long-range scenic with a heavy filter to film the sky and clouds, and are not overly anxious to film detail in the individual leaves and branches of trees, but prefer cottony clouds, soft undulating meadows—try a shot of them with the lens focused at 2 feet. You'll probably like this, too.

PANORAMING BETWEEN SCENES

Here's another synthetic dissolve which has found considerable favor.

Users of focusing cameras can occasionally use this in-and-out-of-focus technic to add novelty to a sequence. A portrait attachment will produce similar out-of-focus effects with fixed-focus cameras.

Make a few seconds' exposure of a subject—then panoram, starting slowly, but ending with increasing tempo. Lift your finger off the exposure lever. After deciding upon the best vantage point from which to film your next subject—perhaps miles distant from the preceding subject—make a rock-steady shot of it. The effect on the screen will be as though you swung suddenly and accurately to your second subject. Quite interesting, if used sparingly and properly.

He: **"Now, there's one that appeals to me—this synthetic dissolve stunt is just the thing to use for shots along the way on an automobile trip."**



STUNTS WITH REFLECTIONS

Here, indeed, is an almost limitless field—if we include mirror shots. For many, many cinematic tricks can be done with the aid of a window pane or one or more mirrors. Only a very few can be given here.

You can obtain somewhat grotesque, yet pleasing, effects by making ricochet shots off glistening auto headlights, hoods, garden globes, and silver trays. Surely you'll recall the tremendously dramatic bit in a professional film wherein an image reflected in a mirror-still lake was gradually, yet effectively, faded out by plopping a stone into the water? You



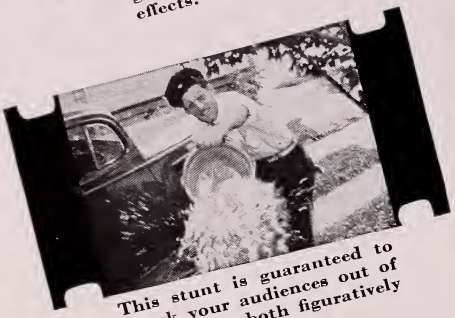
Mr. M. W. Swaney of Montclair, N. J., is the maker of this novel reflection shot.



This unique "signature shot" is from the reels of Mr. H. H. Johnson of Rochester, N. Y. See page 151.



Invisible window panes suggest all manner of ludicrous effects. Here's one of them.



This stunt is guaranteed to knock your audiences out of their chairs both figuratively and literally.

can use this ruse to conclude your film version of your next vacation at an inland lake.

Example number one of the use of glass to add interest to your reels is that of making a shot of a youngster through a large pane of glass close by so that your movie audiences will have no inkling that you were shooting through glass. Then having the young lady slowly lean forward and flatten her nose against the pane.

Example number two also requires that your screen viewers do not know that there is a window pane between you and your subject—a pane, incidentally, without flaws.

The idea this time is—well, if you are a devotee of the circus, you've probably seen the clowns douse each other with water from a group of buckets . . . then one of them suddenly turns around, grabs a new bucket, and throws its contents at a group of youngsters in a box. The contents, however, are confetti and not water. But in our movie stunt you use water, which is why that pane of glass in door or window is so necessary.

Show someone washing a car with a bucket of nice sudsy water (which, incidentally, for the sake of the car's paint job he should only use on the wheels). The task finished, he straightens up, mops his brow, picks up the bucket, and without warning, heaves it right at your movie audience.

After you've disentangled them from the furniture they will think it quite amusing. But if you want to attempt something a little less strenuous for your audiences, select for your subject one who uses a garden hose instead of a full bucket of water.

TRICKS WITH MIRRORS

Before we get started with this dissertation on the use of mirrors, one essential factor should be understood. When making movies of reflected objects it is necessary to estimate your focus for the combined distances of camera to mirror and from mirror to subject.

SIGNATURE SHOTS

Many movie makers, who take rightful pride in their reels, will welcome the suggestion that they conclude each large reel of film with a close-up shot of themselves pointing their cameras directly at their movie audiences. This is extremely easy to obtain. Simply borrow a dressing table or other large mirror, take it outdoors, and make a prolonged close-up of yourself pointing your camera at your reflection in it. Chop this up into short lengths to use as signature shots at the end of each of your reels.



She: **"Now that idea is a blessing. We won't have to quarrel any more before our friends about who made which reel. We'll sign 'em with these signature shots."**

DOUBLE EXPOSURE WITH MIRRORS

Here is a favorite of professional filmdom which can be engineered by the amateur without too much trouble. You've seen it often. The heroine sits down at her writing table to compose a love missive to the man whose framed picture rests against the back of the table. She cups her chin in her hands and addresses a few endearments to his inanimate countenance, when—suddenly and wonderfully—he comes to life and smiles at her!

Here's the technic: The framed picture is a mirror, and the line of fire is in a V formation. At one end of the V is the camera —sighting over the heroine's shoulder at the point of the V—the framed "Picture." At the other end of the V,



The young man in the picture frame was actually standing several feet distant from the young lady's right shoulder.

and at a sufficient distance so that just his head and shoulders will be reflected by the framed mirror, stands or sits your hero. The lighting upon the heroine and writing table should be somewhat dim, and that upon the hero, ample.

ANIMATION

Frankly, the average amateur movie camera, not being fitted with a single-frame release or one-frame crank as is Ciné-Kodak Special, is not intended for animation work. But as fairly effective animation can be achieved by every movie camera, and as it promises a lot of fun in both filming and seeing, there is no really logical reason why it should be omitted from How to Make Good Movies.

The initial step is to take your camera in hand when it is unloaded, open it up, and see how few frames you could expose by flicking the exposure lever or button. The fewer the better, and the number you expose is somewhat determined by the camera you use. Then load your camera, and, as a starter, try something simple—such as a pipe mincing across a table to a tobacco pouch and filling itself, or a herd of ivory elephants meandering along a mantlepiece.

Obviously, for animation effects, your camera must remain stationary between flicks of the exposure lever. And also obvious is the fact that the shorter the distance you move your subjects between flicks, the slower their progress will be—and vice versa.

Having had your first taste of simple animation you may now want to spread your wings a bit. Highly recommended are the children's nursery and the toy departments of the five and ten cents stores. Armed with a handful of silver, you can do wonders in accumulating two- and four-legged models, houses, trees and automobiles.

There are several cardboard villages on the market. You can arrange them upon floor or table. Streets and sidewalks can be cut from brown wrapping paper. For grass you can probably obtain some of that green, sawdusty material department stores use to dress windows.

The serious table-topper, desiring a realistic background, may use a considerably enlarged snapshot print of trees and clouds; although, as a matter of fact, you need only raise the vantage point of your camera so that you obtain a semi-bird's-eye-view of your little community.

With all this material, a little village will soon begin to take form. Toy automobiles can be placed in position. Then, by flicking the exposure lever—just long enough to expose two or three frames of film—and moving the toy autos about one-quarter to one-half of an inch, and the lever again



Few movie makers have more fun with their movie cameras than Mr. Hamilton Jones, of Buffalo, N. Y., who made the four toy village scenes, above. Even more ambitious is the making of animated cartoons. The two lower illustrations are enlargements from the truly remarkable animated cartoon movies of Mr. Emile Gallet of New York City.

flicked, car wrecks can soon be successfully completed, the victims carried off in an ambulance, an onlooker made to swoon with the help of a bit of fine silk thread—and you'll probably be discussing plans for having a conflagration in one of the cardboard houses so you can work in the youngster's toy fire engines.

Granted that such animation may not be perfect—but what matter? Cars can hustle down the street—turn and back into driveways—climb curbs and knock down trees—pause to disgorge minute occupants—and perform whatever other capers occur to their Gargantuan manipulators.

You'll generally want to guard against the appearance of any "foreign" objects, such as room furniture, in your toy village movies. But every now and then you can lend a startling note to such films when, after a series of village scenes has accustomed your audiences to your land of make believe,



The three illustrations in the left column, above, are from the movies of Mr. Louis W. Bleser of Lynbrook, Long Island. Those in the right column are more examples of the fine filming of the ubiquitous Mr. Hamilton Jones of Buffalo, N. Y.

a gigantic human hand suddenly appears as though out of the sky and lifts one of the larger houses from its foundations. If most of the houses are cardboard, you can create a first-rate hurricane by fanning your miniature city with a stiff piece of cardboard or by turning an electric fan upon it. Such shots, spliced in between a few made out of doors of a storm swept sky, will prove to be most realistic. A thrilling railroad disaster may be pictured with a little careful film editing. Show your "flyer" being wrecked, then arrange the coupled cars in a pile-up, and, with your camera upside down, film the cars as you pull them off the heap with a thin string or an unseen hand. When this scene has been reversed end for end in the film, you'll have a first rate train wreck.

Although primarily intended as a brief description of animated model filming, this chapter also pleads the fun value of this form of relaxation. To some, admittedly, such use of odd moments may be synonymous with "frittering." But is it really? Lives there a man who doesn't yearn to

get down on all fours and join children in playing with a toy train outfit? And where is the woman who will not go into ecstasies over a doll house? Both of which, incidentally, would make excellent subjects for animated model films.

Many parents, under the veil of instruction, have realized as much pleasure from toys as have their children. All that is necessary, apparently, is legitimate excuse for enjoying themselves in this manner. You now have it.

She: **"I've a sneaking suspicion that Billy isn't going to see much of his toys in the next few weeks."**

He: **"Don't be silly—he can help me make movies of his trains."**



STUNTS WITH THREAD

While not true animation, you will win more than tolerant chuckles from your audiences if you work an occasional shot into your reels in which the actual animation of objects is by invisible threads and the apparent animation by some source of incongruous inadequacy. For example, a large cardboard packing box slowly and erratically making its way across your lawn—a box which, when lifted, discloses a tiny kitten as the motive power. Or await an opportunity when your faithful dog has gone sound asleep, and, attaching a toy cat (which he has never before seen) to a thread, tow it across his nose and snap your fingers just as it gets in front of him.

And these examples only start the list.

But this chapter must come to an end. The suggestions on its pages should be regarded as just that—suggestions. They are not intended as a



complete listing of all the many bits of harmless cinematic subterfuge you can use to enliven your movie library. If you attempt and like trick shots, try many of those mentioned. You'll find that they will point the way to many more which will occur to you as you progress.

PLAY MAKING

HERE, again, is a subject about which more than a few books have been written—many of which individually bulk far larger than good judgment permits for the entire contents of How to Make Good Movies.

Yet most owners of amateur movie cameras are quite frank in their admission that they are not at all interested in using their cameras for subjects other than purely personal films of family, friends, home, and vacations. At the other extreme is a small and determined band of enthusiasts to whom trouble means nothing in the making of comedies and dramas with a genuinely professional finish.

The admission must regretfully be made that this latter group is likely to find slender pickings in this chapter. So we will not stray far from the theory that most cinamateurs are not overly interested in the complex phases of cinematography. Yet equally firmly entrenched is the belief that even the veriest amateur will, if simple play-making promises good fun in the taking and showing, elect to thread an occasional movie sequence on a simple plot.



He: **"Right you are! If play making is really easy, we're all for it."**

A simple plot, for example, such as this one for your children and their friends.

HUNTING THE WHIFFENPOOF

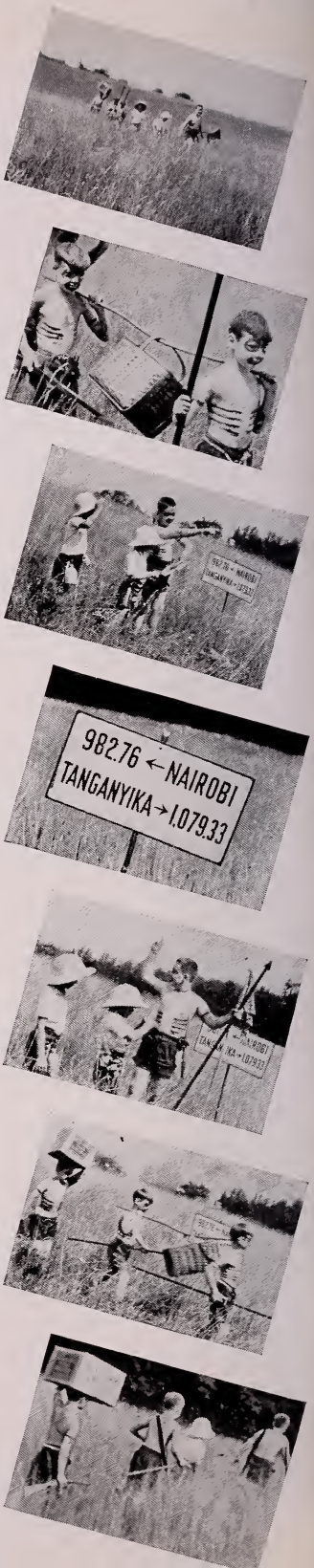
This thrilling big game picture can be filmed on any half-acre of meadowland. For, although only vague rumors exist as to the appearance and habits of whiffenpoofs—due to the fact that no one has ever really *seen* one—the cinematic aspects of whiffenpoof stalking are the essence of simplicity.

The cast for this epic, as has been stated, consists of your children and their friends, attired for the hunt.

Following the customary procedure of big game pictures, the first scene should be a medium shot of the hunting party in camp on the "veldt"—Africanese for vacant lot. The youngsters' tent can do duty in this scene, also a bit of mosquito netting and likewise that longlegged rubber bathtub that your youngest has recently outgrown. The boy playing the part of the Boss should at this point be filmed striding through the camp uttering terse directions to his camp followers.

Now for a title—*On Safari.*

Then comes a distance shot—as distant as nearby civilization permits—of the expedition trekking in single file through the field. With the permission of the dictator of the kitchen, Obediah and Rastus Napoleon Jones could very well be worked into this scene as porters. A shot or two of them

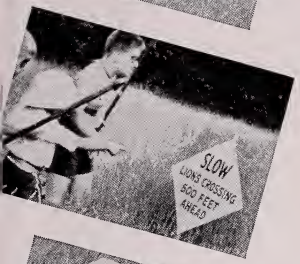


Here's how one couple filmed the story of the fearsome Whiffenpoof. Try it — you'll have as much fun shooting the story as will the children.



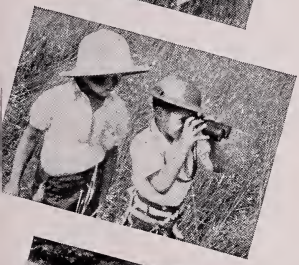





SLOW
LIONS CROSSING
500 FEET
AHEAD



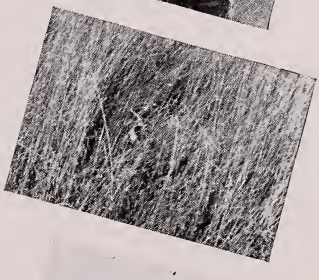






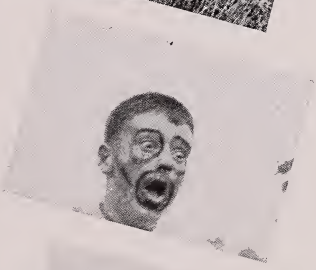








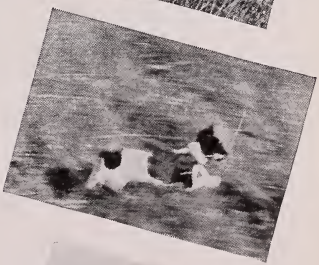


















trudging along precariously balancing soap boxes on their heads will be quite in order.

Then another title—*Whiffenpoof Country.*

In a medium shot of the safari, the leader is seen to hold up his hand to halt the weary column. They make temporary camp.

Another title—*Marvin Goes to Bag a Big 'Poof.*

At this point make some medium shots and close-ups as the leader bids good-bye to his "wife," and fares forth with his head "gun-bearer," Aha, to outwit the real king of the jungle—for your scenarist has it on good authority that a lion isn't one-two-three with an aroused whiffenpoof.

Now for some shots at various distances as the two feel their way through the tall grass. Aha, the "gun-bearer," lifts a cautioning finger, points ahead, and speaks . . .

Title—"*Simba!*"

The Boss raises his gun. Close-ups of their determined countenances. Semi-close-ups of some bushes being violently agitated by the unseen animal. A medium shot as the two take to a convenient tree—make this at half speed, if you can, to double their agility on the screen. More waving of bushes—a flash-back to the treed hunters—then your denouement as a very small kitten or puppy placidly ambles out from those same bushes.



Begging your pardon, but it most certainly is. You've strung together a series of scenes on a *created* idea, rather than on an everyday occurrence in your family.

Now let's see how a similar technic can be applied to adults. You may

object to this plan on the grounds that you have no scenario, no "props," no real talent, no skill at make-up. But you don't need them, nor even want them, to make a movie that will provide endless fun in both filming and showing. An amateur movie play can be one of two things—a painstaking production tirelessly striving for professional finish, or a catch-as-catch-can take-off of Hollywood technic. Both methods have their advantages, but this chapter deals solely with the latter.

The scenario is the first problem and one quickly disposed of. There are four sure-fire sources of material—a play, a movie, a book, or a short story. Select something you have just seen or read. You needn't even take the time to rough out a skeleton scenario, although it would help if a movie or play is to be the subject. But if it is a book or story, your scenario is ready-made—merely check the scenes you want to film.

The matter of "props" is also quickly solved. Just don't select a story that calls for any considerable amount of "props." You'll find that your home and your city will supply suitable backgrounds.

Now—as to talent. Working on the assumption that it is not your intention to produce a screen masterpiece, but merely to create diversion for every one concerned, casting your characters becomes a simple matter. Individuals who would instantly choose an appendectomy in preference to playing a part in an amateur stage performance will step before a Ciné-Kodak without even batting an eyelash. So you, with the full authority of host, camera owner, and entrepreneur, can select your characters as you will. Whether your group numbers a half dozen or a dozen, it is always easy to add or delete parts from the original story.

When your characters have been selected you will find yourself face to face with the matter of make-up. Here again, there is an easy solution. For many little skits, you won't even need make-up, other than ruffled hair and glowering expressions. Yet the speed with which a group of staid and respectable citizens can be transformed by powder, lipstick, and burnt cork into leering villains, moon-struck juveniles, village yokels, and doddering ancients is nothing short of breath-taking. If one of your number is expert at make-up, or even pretends to be, assign this phase of the production to him. If not, let each character use his or her own ingenuity, for a lack of professional results in appearances will add to, rather than detract from, the success of the venture.

While members of the cast are acquiring what they feel they need in the way of facial expressions and costumes to make their cinematic debut, you and an assistant should review the thread of the story and plan the locations to use when shooting the different scenes. If the story, for example,

is to be enacted at several different locations—the first and last of which are your home—make all the shots you need at home before moving on to the next location. And when shooting, watch the backgrounds—don't permit Nora, goddess of the kitchen, to barge into the living room set with a tray full of sandwiches just as Dapper Dan is making off with the family jewels. Beware the stray bicyclist in your shot of the villain fleeing from the slavering bloodhounds (Pete and Repeat—the fox terriers).

But you haven't yet thought of a plot? Here's a simple enough one built on the everyday, though somewhat exaggerated, experiences of the average housewife.

THE DOORBELL SYMPHONY

This plot is ready for the attention of you, your friends, and your movie camera. It is given in story form for you to interpret as you see fit. The cast consists of a wife and husband, his friend, their maid, an automobile salesman, a piano tuner, and house-to-house agents for brushes, a vacuum cleaner, kitchen ware, silver polish, and a soap of miraculous cleaning properties.

The husband is first seen admiring a new car through a show window. He is promptly button-holed by a salesman and taken out for a demonstration.

TITLE—"*It's all right with me, but I'd like my wife to see it before I buy.*"

The salesman takes down their home address and, as the husband turns away, he collides with a man who proves to be a long-lost friend. After enthusiastic greetings the husband speaks—

TITLE—"*You're coming home with me to dinner, and I won't take 'No' for an answer.*"

They disappear arm-in-arm to celebrate their reunion.

The wife is shown at home seated at her piano. From her face, and a close-up of her finger on the offending key, it is evident that the piano is occasionally emitting a very sour note. She goes to the phone and calls a piano tuner, shown at his phone in close-up.



She: "This movie skit sounds like grand sport."

A clock face reading 4 o'clock. Hilda, the maid, answers the summons of the telephone and, after difficulty, discovers that the call is for her mistress who, while Hilda lingers interestedly nearby, comes to the phone to learn that her husband is bringing home a guest for dinner. Both are shown at their respective phones in close-ups. At this point the car salesman arrives, and the wife gives Hilda instructions as to the preparation of the meal and the necessary "picking up" to be done—

TITLE—"*For once, Hilda, get things right. We're having a guest for dinner. And remember that the piano tuner is coming.*"

The new car rolls away from the house and Hilda goes despairingly to work. A hand presses the doorbell. "Ah," thinks Hilda with an effort, "the piano tuner." The caller, however, is an enthusiastic brush salesman who barges right in and proceeds to demonstrate his wares. Hilda at first protests, but, seeing the progress he is making, she registers approval, which spurs the salesman on to heightened industry. In rapid succession arrive a vender of an all-purpose soap, a demonstrator of a new silver polish, a woman who has aluminum kitchen ware to sell, and a vacuum cleaner dispenser. Despite Hilda's feeble and bewildered protests they swarm over the house, brushing, scrubbing, sweeping, and preparing the evening meal.

At this point a flash-back to the wife discloses that she is now behind the wheel of the new car. Delighted, she turns to the salesman—

TITLE—"*I'm sure we'll buy it. But why don't we pick up my husband at the station (or office) so that you two can settle the matter?*"

At home the panic has increased. Whenever the go-getting salespeople cease their work and try to get an order, Hilda beams happily and points out something else for them to do. The piano tuner finally arrives and plunges into the midst of the fracas. Unable to hear the notes, he commands silence, picks up a sheet of music of some song such as "The Man on the Flying Trapeze," runs off a few bars, and begins to sing. One by one the others join him at the piano. From the expressions on their faces it is evident that they are going sour on a high note. They look reproachfully at each other and try again. It's no go. The piano tuner speaks—

TITLE—"*What we need is a couple of good tenors.*"

The camera swings to the doorway and there stands an amazed foursome—husband, wife, guest, and car salesman, order blank in hand. The guest glances in bewilderment at the husband, he at his wife, she at Hilda, who merely wrings her hands in helplessness. The piano tuner points to

the troublesome note and beckons the five to join the rest at the piano. They approach dubiously as the group again commences the chorus. The husband, guest, and puzzled yet genial car salesman join in and provide the needed harmony. They all look pleased and again start the song at the beginning. But the wife, almost frantic, begins to check on the state of the house and the dinner while Hilda tags along. Delighted at the amazing conditions she encounters, the wife returns to the living room with Hilda and they both join the entire group in the chorus.

* * *

Frankly, doesn't that sound like good sport to make? And it will be equally pleasurable to show if you mix up your camera distances and angles to best advantage, and vary the length of your scenes to suit the tempo of the story.



He: **"Well, why not? This playlet ought to be a lot of fun."**

She: **"Let's do it real soon. I'll invite the whole crowd, and we'll make an evening of it."**

Here's another simple scenario that will appeal to every owner of a dog. If you like play making better than dogs, borrow your neighbor's pup. In any event, we think you'll enjoy making and showing . . .

THE PUP'S REVENGE

The Sunday dinner is being prepared in the kitchen. The pup sits nearby, gazing raptly at the roast as it is removed from the oven for basting. He gets under the feet of the cook and is banished to the back porch. The cook takes a pie from the oven and as she places it on the

porch to cool she espies the pup. She points to the pie and waggles a finger at him in admonition and then starts back into the kitchen. She wheels about, cogitates for a moment, and then calls him into the house out of temptation. He is next shown nosing his way out the front door and starting around the house for that pie. The cook is seen in conference with her mistress.

TITLE—*Remember, Nora, we want the pie served hot.*

The cook takes the pie from the back porch and places it on the top of the oven. The pup comes bustling around the house and sniffs in bewilderment at the recent resting place of the pie.

Then the family is shown gathered around the dinner table. The head of the household carves the roast as all look on in anticipation. Our hero, the pup, regards them from the hall doorway. A pair of badly scuffed shoes are shown ascending the back porch steps and a grimy hand knocks at the back door. The pup, barking madly, rushes to the kitchen. The cook goes to the door to learn that their visitor is a tramp who, in pantomime, asks for a hand-out. With sympathetic mien, she conveys his request to the family. They look equally compassionate, and a plate is prepared for the tramp. The pup, who has returned to the dining room, leaps about enthusiastically under the impression that it is for him. When the tramp is invited into the kitchen, the pup discovers his mistake and crawls morosely under the stove.

The family, having finished dinner, adjourn to the living room or front porch. The pup joins them, and rests his head upon his master's knee in supplication.

TITLE—*Has the dog been fed?*

Apparently he hasn't, and one of the children departs with Fido dancing happily at his heels. The youngster gets a dog biscuit and offers it to the pup. He takes it sorrowfully and retires to the back porch. The tramp, now finished with dinner, skirts the dog carefully and goes whistling down the street.

At this point the family decide to go out in the car for a ride. Again the pup loses out. Hours pass, as indicated by a clock face. Yet when they return, the faithful pup leaps about them in delight.

The mistress speaks to the cook:

TITLE—*We'll have cold cuts for supper, Nora.*

The pup frisks about her feet as she prepares the meal. She notices

him, nods her head understandingly, gets his dish, fills it with water, and puts it out on the porch. He looks more mournful than ever.



He: "There you are! He's in character for the 'mournful pup's' part, right now — aren't you boy?"

The platter of cold cuts is shown on the table. The pup, walking slowly, enters from the hall and approaches the object of his desire. The cook, bearing other food, starts for the dining room. The pup backs out of sight. Again he starts in, and again he is interrupted. Then, as the cook calls the family, his cause appears lost. They seat themselves at the table.

At this point, a neighbor, looking from her window, sees the tramp busily engaged in removing a horn or lap robe from the family's car. She hurries to her telephone. The cook answers, calls the master. He goes to the phone, registers astonishment, stops for an excited moment at dining room door to impart the news to the family, and rushes from the house, closely followed by the others. The pup does not follow. The tramp, seeing trouble heading his way, makes off across the back fence. The pup approaches the platter of cold cuts. The family examine the car to see what damage might have been done. The pup is by now very, very close to his anticipated dinner. The family start back for the house, and, gesturing excitedly, enter the front door. They seat themselves at the table, and then stare in astonishment at the denuded platter. The head of the house, nodding grimly, speaks.

TITLE—*Where is that dog?*

The object of his wrath, in the living room, is shown licking his chops. The master is seen taking a whip or yardstick from a closet and starting off.

The pup suddenly hears him coming and puts his head down and simulates innocent slumber. His master stops above him, bewildered—the sleeping pup obviously is not guilty. Finis.

Every owner of a dog will immediately recognize that most of the shots called for will be easy to obtain. (Your dog, let it be made clear, is not actually to be shown pilfering food from the dining room table.) A few of the shots, however, may seem puzzling. Those of your dog backing out of sight are made by merely operating the camera upside-down as the dog walks forward, and then reversing these scenes, end for end, in the processed film. To get him to lick his chops, smear a little syrup on his muzzle. The last scene, as he hurriedly feigns slumber, is another upside-down shot, started when he actually is asleep and is then suddenly awakened by the snap of your fingers.

* * *

Some serious-minded readers may feel obligated to raise the point that these play-making ideas are all comedies. Why not something more worthwhile? Why not a drama?

No! A thousand times no—unless you are willing to have your drama misinterpreted and greeted with howls of unwelcome laughter from your movie audiences. Drama, unfortunately, is too often the first recourse of embryonic producers. And a drama, unless it is done well—in fact, to perfection—is simply terrible.

Let's stick to comedy, which is supposed to be amusing.

Here's a stop-motion scenario that you'll enjoy making and showing. Once more, no acting ability or props are needed. Just your camera, a roll or two of film, a Kodaflector, and a few interested friends.

VANISHING CREAM

The hostess, busy at her dressing table, turns to greet her husband, who has apparently arrived home late. She points to her watch, and speaks:

TITLE—"*You'll have to hurry—our guests will be here any minute.*"

He throws off his coat, takes a package out of his pocket, and speaks:

TITLE—"*Be ready in a jiffy. By the way—here's a new vanishing cream I saw in a store. Thought you'd like it.*"

She thanks him, unwraps the package, turns the jar around to read the label which should then be filmed (so your screen audiences can see the home-made lettering reading, perhaps, "Eureka Vanishing Cream

—a product of the Orient made by a secret process.") by holding it against the back of Ciné-Kodak Titler's easel so that its label is on the same plane as the easel.

She applies some of it to her face, and turns to speak to her husband:

TITLE—"*It feels delightful. You'd better use some of it on those chapped hands of yours.*"

As he picks up the jar the doorbell rings. (Shown by a close-up of a finger pressing the bell.) She runs to welcome the guests and enters the living room with them. The husband rubs the cream on his hands, as shown in a close-up, then comes downstairs and greets his guests by shaking hands with all the men and clasping each woman's hand in both of his—which action is shown in a series of close-ups of their hands, to cue the rapid-fire disappearance of the guests which is shortly to follow.

From this point on people begin to vanish—which is done by operating the camera from a steady table or tripod, having all the people in view of the camera freeze at a signal, and then having one of them step out of the picture before another signal is given for the action to re-commence. The hostess disappears first, perhaps while tuning the radio. Every one appears to think that she has just slipped out of the room for a moment. But then the other women begin to vanish—as they are playing bridge, pausing while dancing, or merely sitting chatting. The survivors start a frantic search for them. One of the men pulls out the davenport, crawls behind it to investigate, and when the others become concerned about him and peer behind it, no one is there. Another of the men goes to call the police—but



when they look for him the only trace is the telephone with the receiver off the hook. Use lots of close-ups of guests' startled expressions.

Finally nobody is left but the host and his dog (which should have been shown in one or two of the previous shots begging for candies or salted nuts —which, to his disgust, he is refused). The host hurls himself onto the davenport, lights a cigarette, and scratches his reeling head. The reason for it all suddenly comes to him—*the vanishing cream!* He rushes from the room, returns with the jar, examines it carefully (the label is again shown in a Titler close-up), and then drops the jar to the floor so that its cover flies off, claps his hand on his forehead—and vanishes! At this point the hungry pup laps up some of the "cream" (this time real cream, or lard smeared with syrup), licks his chops, and likewise goes the way of all flesh.

* * *

And here, to end our examples of the type of elementary little skits which you can think up for an evening's or week-end's amusement in making, and much enjoyment in seeing, is one more uninvolved idea for the attention of your camera. This time it is built around upside-down or reverse-action filming, which is explained in the Trick Shots chapter of this book.

THE NERVOUS WRECK

Our hero is propped up in bed, holding a match to his cigarette with a trembling hand. His wife, in close-up, is shown anxiously telephoning the family doctor. The doctor nods wisely and asks for further symptoms. She continues . . .

"*Why—he kicked the cat downstairs because it stamped around too much . . .*"

The doctor purses his lips. In the bedroom the nervous wreck tamps out his half-consumed cigarette and promptly lights another. The wife continues . . .

"*. . . and he set a bear trap for the neighbor's dog . . .*"

The doctor raises an eyebrow at this news.

"*. . . and even the children are afraid of him. You've simply got to do something.*"

The doctor glances at his watch, apparently says, "I'll be right over," and hangs up.

The patient is by now playing solitaire. At his wife's unannounced entrance he hurls the cards ceilingward and she precipitously retreats.

A hand on the doorbell. The wife admits the doctor. He cheerily enters the bedroom and promptly finds himself on the receiving end of a

baleful glare from the patient. The doctor takes the patient's pulse, blood pressure, peers knowingly into his oral cavity, shakes his head.

"*You've been going at too fast a pace. I'll give you something to slow you down.*"

The patient watches the doctor remove some pills from his case, slip them into an envelope, and speak . . .

"*When you feel one of these nervous spells coming on, stop yourself . . . throw yourself into reverse. One of these pills will help.*"

The doctor bids him good-bye, leaves the room, and then pops back, just as the patient is lighting another cigarette, to say . . .

"*And you've got to stop smoking and drinking.*"

From this point on much depends upon your own inventiveness. Typical shots: The husband lighting a cigarette, blowing out great clouds of smoke, being caught in the act by his wife, vigorously protesting against



She: "You're going to be the hero of my next movie, darling!"

the ban on cigarettes to her, taking a quieting pill—INVERT THE CAMERA AND RETAKE THE SAME ACTION FROM A DIFFERENT ANGLE—then inhaling clouds of tobacco smoke, waving the flame out on the match, unscratching it, putting it back in the box, replacing the cigarette in his case; taking a pill, and then, seeing the mistreated cat, trying to call it to him—INVERT AND RETAKE—the cat backs hastily out of the room; pushing the lawn mower, it picks up a twig and jams, he wrestles frantically with it, recollects his doctor's advice and pops a pill into his mouth—INVERT AND RETAKE—he proceeds to back about the lawn laying down a nice carpet of uncut grass; lining up a putt at the

golf club, pacing up and down to get his nerves under control, then approaching the ball, tapping it into the cup, nervously swallowing a pill to quiet himself—INVERT AND RETAKE—the ball bounds back out of the cup and rolls up to his feet; trying to show the youngster how a bicycle should be ridden, having difficulty steadying the handlebars, taking a pill—INVERT AND RETAKE—swooping about the lawn backwards and finally disappearing into the garage; dealing a bridge hand, flicking several cards off the table because of his nervousness, pausing to take a pill —INVERT AND RETAKE—the cards all flutter back into his hands to the astonishment of his wife and guest.

Remember to think of each reverse-action scene as it will look when screened. For example, in the scene filmed with the camera inverted of the bridge episode, the guests should register astonishment *while* and *before* he deals the cards, because when this scene has been reversed the cards will apparently be flying back into his hands. And use lots of close-ups of the package of pills and of the guests' amazed expressions.

Then, for your finale, have the patient wrathfully request his doctor to come and see him. When he does the patient describes in pantomime some of the embarrassing experiences he has had, tells the medico that his services are no longer desired, and then, in a title, demands a bill. The doctor gives it to him, and as the patient is making out a check, the doctor perplexedly takes one of the pills, crunches it thoughtfully. The patient thrusts the check at him, he takes it, an expression of bewilderment crosses his countenance, he gulps, and thrusts the check back toward the patient who joyfully takes it, tears it up, and, rising to his feet, dramatically and forcefully bids the doctor farewell. The preceding scene, of course, calls for right-side-up filming. But the last scene, an especially entertaining effect, should be filmed with the camera inverted as the doctor runs backwards out of the house and into his car, which in turn, backs briskly out of sight.

* * *

All these little scenarios have admittedly been very, very amateurish. Some of our readers, who by now may be feeling their cinematic oats, may well cock a scornful eye at such plebeian attempts at play making. They will want to work with complete, scene-by-scene scenarios, an official cameraman and assistants, a well informed lighting expert who thinks of his task every bit as much in terms of effects as in terms of exposure, a make-up expert, a film cutter, a title specialist, etc. But this modest book is about *home movies.*

To more ambitious cinematographers—all good wishes.

We've used up all the space, and more, allotted to movie making. Now let us see what can be done with the scenes we have made . . . what *should* be done before we show them.

EDITING

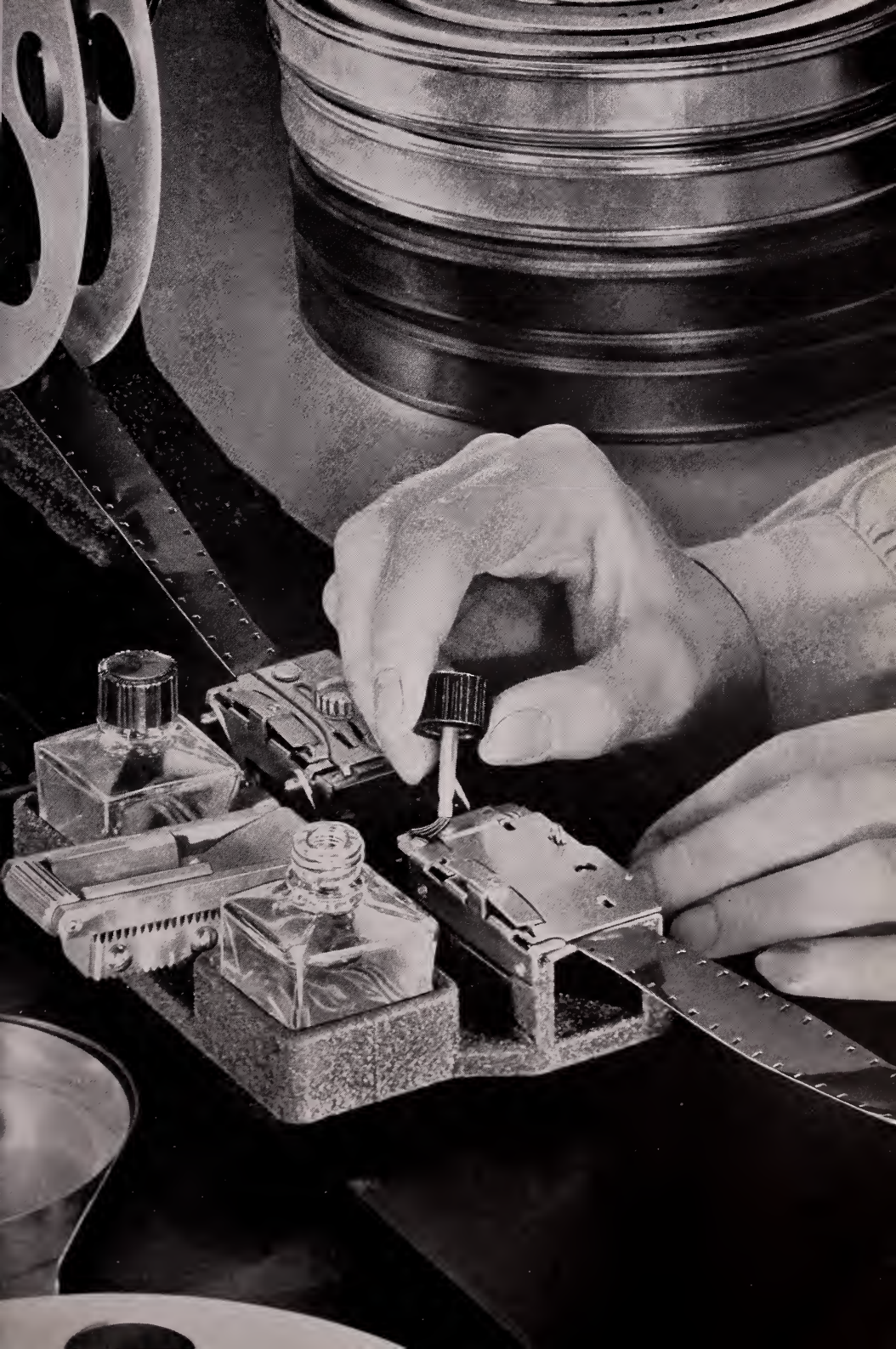
THERE are two distinct phases to home movies.

One is their taking—and its success is based upon your use of exposure, focusing, camera angles, continuity, filters, and the like.

The second phase is the showing of movies—and, as there is more to the taking of movies than merely popping film into a camera and pressing the exposure lever, so is there more to the showing of movies than threading short lengths of processed film into a projector and pressing a switch. This projection technic, in all truth, presents a film story as unfinished as a stage production would be if the director were to supply a new cast with costumes and copies of their roles, turn on the footlights, raise the curtain, and say, "Act!" Every movie maker who has dipped into amateur theatricals knows full well that the intelligent director spends long hours scrutinizing his material by eye and ear, occasionally changing the cast, often rewriting or chopping a line that a character cannot deliver with naturalness and conviction, altering the position or nature of a "prop" or background. All this is nothing more or less than editing the material with which he has to work so that, when finally shown to an audience, the performance will be smooth and convincing.

You may object that this is quite a different problem than the showing of everyday home movies. And you will be right in so far as it is much easier to iron out the rough spots in a movie library than it is in a stage production. But both benefit equally.

Let's take a more simple application of editing—of having the right things in the right places—and assume that you, and several of your friends, take a trip. You all see about the same sights and sites, bring back a comparable mental record of your experiences—amusing, provoking, and boring. And yet, when you are all together months later with others who are anxious to hear of your journey, one of your group will relate the most entrancing story—using the same material available to you all, but presenting it so skillfully that you, yourself, give rapt attention.



But he is a born raconteur, you protest?

Not at all! He has deliberately mulled over your mutual experiences for the specific purpose of spellbinding.

You doubtless have other friends who can spin yarns with the most devastating effect upon the risibilities. "A natural story teller," is the popular verdict—and again it is wrong. That smooth-flowing, mirth-provoking, and casually delivered account is the result of countless other deliveries, many of which have probably gone very, very sour, from which he has learned the technic that is now disarmingly unapparent. He studies each audience in advance, decides to drop a line here, stress an inflection there, pause dramatically at this point, step up the tempo at the climax. In short, he *edits*.

And so should every home movie story be edited. The impossibility of achieving perfection with each and every scene on the counts of exposure, focusing, scene length, and continuity is manifest. *Some* of your film must be discarded. Even if every scene is perfectly exposed, one or two may be overlong. Almost invariably some rearranging of scenes will be helpful. Probably a title or two will add interest and coherence.

Who is going to do the job?

If you simply do not have the time, get some one to do it for you. Your dealer can undoubtedly help you out. Or, if he can't, he'll know of some young movie enthusiast willing to undertake the task. One or the other will gladly sit down with you as you run through your films and, at their conclusion, briefly discuss rearrangement and titling. He can do the actual editing in your home or in his store or home. He can show you the titles suggested, and either make them himself or have them made at quite reasonable charges. Certainly you will obtain vastly more interesting movies through editing and titling—but you'll miss a lot of fun unless you do the work yourself.

For home movie editing—if you've the proper, inexpensive equipment—is really fun. It's a challenge—not to your patience—but to your ingenuity. The films you show in your home are valuable to you in good part because *you* exposed them and are responsible for their good qualities. And if you make them better by editing, there is just that much more of which you can be justly proud.

Perhaps so, you may reply, but I haven't the time to spare to spend countless hours over a splicing block.

Truthfully—it doesn't take "countless hours." And those hours it does require will seem like minutes.

She: **"Why not let me do most of the editing? I've got more time for it than you have."**



But, before you decide whether or not to do your own editing, let us take a typical short reel of film and see what its editing amounts to from the viewpoint of both time and added interest.

To begin with, there's the equipment: Projector, screen, paper, pencil, and film—you have these; movie viewer, rewind and splicing block—you will need these if they are not already part of your kit. The splicing block referred to is not of the type supplied with each Kodascope. This is sufficient for simple splicing, for taking care of possible breaks which may occur when you and your projector are away from home. But it is not

Movie editing is hard work only when you attempt it with inadequate equipment. Properly outfitted, editing becomes one of the most engrossing of pastimes—and certainly one of the most remunerative.



intended for the splicing necessitated by any serious attempt at editing. For this you need the really efficient splicing outfit described later on in this chapter. And likewise a two-way winding device and movie viewer. Editing is all a matter of system, and these inexpensive, time-saving accessories are little short of essential. But let us return to our typical film —a holiday picnic on a 100-foot roll of 16 mm. film, or on one roll of 8 mm. film, let's say.

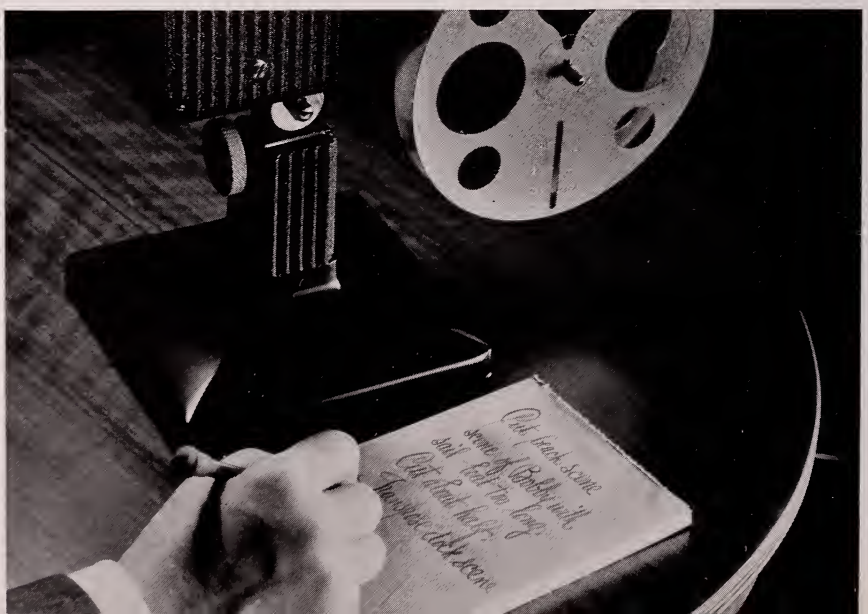
The first step is to set up projector and screen. If you elect to do your editing at night, have a room light at hand to aid you in making your notations. If in the daytime, "throw" a small picture on a nearby screen.

First—project the film to familiarize yourself with its contents and quality. This will take four minutes.

Then rewind it and project it again. As you do so jot down a brief description of each scene, somewhat in this manner:

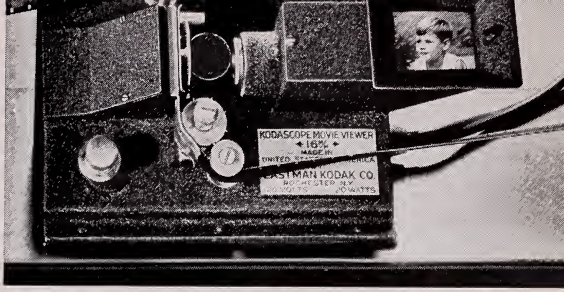
GROUP PILING INTO CAR AT START OF PICNIC—cut delay before car starts . . . SHOT OVER BACK OF FRONT SEAT THROUGH WINDSHIELD—cut at bump near end . . . CAR STOPPING AT PICNIC SITE—O.K. . . . ANN AND JANET SETTING THE PICNIC "TABLE"—O.K., but cut first part, underexposed . . . ME STARTING FIRE—too long, cut end . . . JANET WRESTLING WITH THERMOS —good, but cut into three short lengths for comedy relief . . . ANN AND JANET ADMIRING THEIR HANDIWORK—O.K. . . . JIM ROASTING STEAKS—O.K. . . . JIM SERVING ANN AND JANET—good . . . ANN SERVING SALAD—good . . . JANET STRUGGLING WITH STEAK SANDWICH—O.K., but cut end where merriment overcame camera steadiness—etc.

Reviewing film is easy. You can jot down scene-by-scene notes as fast as your movies are projected.

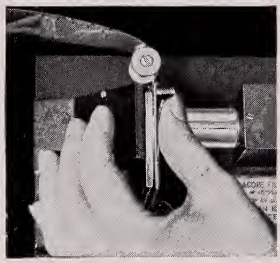


This will only take another four minutes, because you will discover that you can make your notes as rapidly as the movies are projected.

Again whisk your film back onto the upper reel by motor rewind, remove it from the Kodascope spindle and slide it onto the left spindle of the block onto which are established rewind, illuminated viewing device, and film splicer. A few seconds more and the film leader is threaded through the viewer's gate and onto the right, or take up, reel. A glance at your notes—you want to cut out the action lag in the middle of the first scene. The film is wound slowly to the right until the beginning of this lag is seen on the viewer's ground-glass screen . . . *snip*—pressure on the lever at the viewer's gate nicks an identifying mark on the film edge which in no way mars the film image or hinders further projection. A bit more winding to the right—the car in your movie is seen to start, and another *snip*. Another turn to the right and the intervening film to be discarded is out of the viewer and above the splicing block. Finger tips locate the two nicks and the undesired footage is torn out of the film. The two jagged edges are snapped onto the pins on the splicing block . . . the secured, two-bladed shearing arm is swung downwards, trimming off both ends at once. A touch of the brush from the tiny water bottle in back of the splicer, and the emulsion is loosened on the last eighth-inch of the left strip.

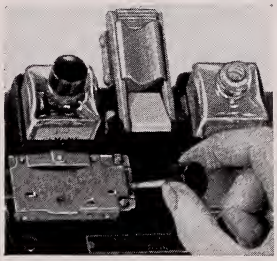


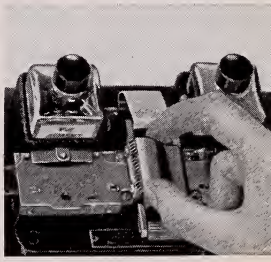
The viewer, particularly with 8 mm. film, is little less than a necessity for successful editing. The ground glass screen shows the movies . . .



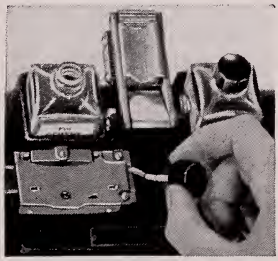


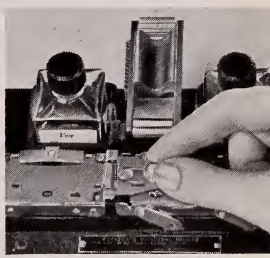
. . . then you press the lever by the viewer's gate—and nick a harmless identifying mark.





The four easy steps to lasting splices: After the shearing arm has trimmed both film ends you moisten the film edge with water . . . rub off the loosened emulsion with secured scraper . . .





. . . touch a bit of film cement to the clear film base, then swing over the other film end and press the cover plates together—and the splice is made.

The attached scraper is drawn across this edge to scrape off the softened emulsion. A touch of the cement brush on the now transparent film base, and right-hand fingertips swing another lever to the left, bringing the right film end over and downward to weld the splice.

Takes no longer to effect than to describe

A bit more winding to the right and the viewer's screen shows that "bump" in the through-the-windshield shot. Two more snips, another splice, and that jarring note is in the wastebasket. Then on to the "under-exposed" beginning of "Jim gathering firewood." It's out in a jiffy and the two ends are sealed together. Next is that rather extended scene of "Janet wrestling with thermos" which we decided to divide three ways; for comedy effect. Two thirds are cut out, the film is wound back to the end of the shot described as "Ann and Janet setting the picnic table" and half of the thermos shot is spliced in at this point; the other half between the succeeding "wood gathering" and "fire starting" shots. Then the film is wound forward again to the last scene described in our notes, the unsteady section is deleted—and the job is done.

From the time you first set up your projector and screen, not more than thirty minutes should be required to view the film and effect the changes just described. But, more than likely, this picnic movie did not stop with the shot of Janet struggling with the huge steak sandwich. Other shots were probably made paralleling the progress of the meal. And probably after lunch, the camera was taken for a stroll to film some lovely scenery nearby and perhaps a wistful cow which almost stared the camera out of countenance from the other side of a fence. And then, drowsy with well-fed inertia and the warmth of the day, filming was abandoned. So we have the odd shots of the scenery and bovine—but no finale.

The Kodascope Editor Outfit represents a complete editing unit within one convenient carrying case. Compact, portable, easily set up, it contains the Movie Viewer, Universal Splicer, Editing Bracket, two winding spindles, film cement and water bottles, space for a film cleaning outfit, extra reels and film cans, an editing tray for short film lengths. It costs substantially less than would the Rapid Rewind, Splicer, and Movie Viewer individually purchased.



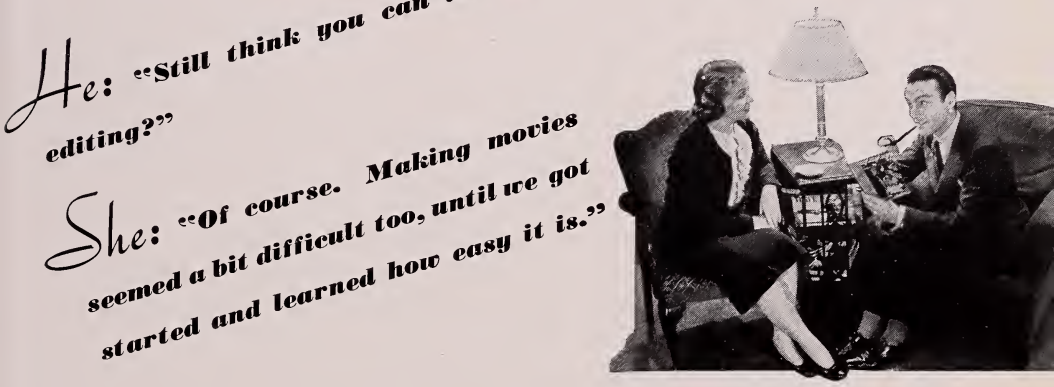
What to do?

Those scenic shots would do very nicely if spliced in immediately after the early scene of the car pulling up at the picnic site. They give the sequence better order — *start . . . journey . . . arrival . . . LOCALE . . . spreading the picnic "board"*—yes, they fit in very well indeed. Now for the cow. No earthly use for her in her position in the reel as exposed, but if we chop that wistful close-up of her

into short lengths and splice them in between close-ups of various members of our group devouring their lunch, she ought to pay her own way in appreciative chuckles from our audiences.

But how about a finale?

Let's see—haven't we a rather prolonged sunset shot in that reel of our western trip of last winter? All right—half of it is spliced in here. And then, last fall we made two or three shots of a campfire on that hunting trip in Canada in which vague figures flitted between camera and blaze. We'll use one of those to follow our sunset. And then, over next week-end, we'll make a shot during the evening of the car turning out of the driveway and rolling out of the range of the camera so that we can get a finale shot of its two gleaming headlights to indicate our departure from the picnic site and give a logical conclusion to our reel.



The mythical reel described is typical of thousands taken daily of countless subjects and occasions. It obviously would have benefited from more forethought by the cameraman. A bit of staging could have been worked into its taking. For example, as soon as that shot of "Janet wrestling with thermos" was made the cameraman could have asked one of the men to proffer his help with an air of masculine superiority, and then apparently *not* be able to open it. Next a similarly supercilious and fruitless effort as the cameraman turns the camera over to someone else to operate, and himself struggles with the cap. The cap having then been loosened out of the camera's sight, a shot could have been made of "Ann" extending her hand for the thermos and casually whipping off the cap.

Little sequences of this type can be worked into the filming of almost

every subject. But the point to be made here is that, regardless of the material with which you have to work, disjointed, halting, or incoherent reels can always be vastly improved by the judicious use of shears and a splicing block.

You perhaps expect at this point the recommendation of a few titles for this imaginary movie.

Not at all.

It does not require a single title!

Granted that some of our movie audiences may not know the other couple in the film. It will certainly not help matters to make an opening title such as, "We go on a picnic with Ann and Jim Johnson." This, despite the fact that some sticklers for movie technic vow that the projectionist should never have to give an oral explanation of any part of his movies—that if the movie doesn't make everything clear, a title such as the one previously mentioned is essential.

The logic of such reasoning is not entirely clear. Why must the host or hostess feel required to sit by their projector in clamlike silence? Why slow down the movie story with unnecessary titles? A simple little reel like the one described can be spliced onto a large aluminum reel between entirely unconnected subjects, separated by a bit of the blank film generally encountered at the beginning and end of a processed reel, and when the first scene reaches the screen the host can introduce the sequence with the casual remark, "Here are a few scenes we made on a picnic we went on this summer with our old friends, Ann and Jim Johnson."

Why not? With this brief announcement the rearranged reel stands on its own feet without need of titles.



He: "More power to the idea. I never could see this 'every movie should be titled' theory."

The occasions when titles *are* essential will be described in the succeeding chapter on titling.

The editing method just described might be termed the editing-as-you-go technic. Most movie makers do not approach the problem in this fashion. Rather, they splice one short length of film to another, regardless of subject matter, until they have one or more large aluminum reels full, and then, stricken with an acute realization of their neglect, closet themselves with film and editing equipment to bring order out of chaos. While perhaps not the most practical method, it is by far the most popular, and there follow a few suggestions which should greatly simplify the task.

Other than correct equipment, the most essential material for successful movie editing, as with movie making, is *ideas*—ideas that suggest a new order for subjects probably joined together on nothing more than the thread of chronology. There are many reasons why you should not always permit subjects to remain in this order. For one, you will not want to regard much of what you have taken as material for "show" reels—reels to be projected for friends who drop in for an evening. Not because these scenes are particularly lacking in the prepossessing qualities of good exposure and focusing, but because they are largely of family affairs, which you should not inflict upon your guests visually with any greater frequency than you would orally. Vacation films, sports, and spectacles—these are in quite another category, being of universal interest.

THE AVERAGE HOME MOVIE LIBRARY

First on the list are "growing-up" reels of each child. These should not include all of the shots you have made of each youngster. Birthday sequences—yes. But not, in their entirety, the scenes recorded about the Christmas tree or upon other occasions when several members of the family are involved. As children receive the lion's share of camera attention, it is generally a simple matter to delete a shot here, another there, with which to maintain the chronological thread of a child's growth and development, without in any way denuding the family reels of views of these important members.

The family reels are second in importance. Shots of your home, friends, week-ends—every movie making family should regularly make movies of these interesting subjects. But shots of friends should only be retained in family reels if they belong by reason of the parts they play in your films. If they, and you, are filmed in the throes of a hotly contested croquet game, tennis match, gay holiday party—then by all means allow them to remain in the family reels. But if they just stopped in for a moment, and you,

more by accident than design, filmed them in stilted poses, lop them out of your family reels for inclusion in your "catch-all" reels.

There are other events which might be retained in family reels but which, for quite opposite reasons, you will want to segregate on individual reels. Vacations, sport films, spectacles—subjects such as these justify individual reels on two counts. One—they have probably received far more camera attention than average subjects. Two—if left in their present position, they would swell the proportions of a family film library beyond comfortable and logical limits.

And then there is that host of orphan shots which, though correctly exposed, cause you to wonder why you ever filmed them, and, more important still, what you are going to do with them now that you have them. There is no need to describe this type of shots—you'll find representatives in every home movie library. The solution is to cut them out of their unrelated neighbors and string them together on what have been previously termed "catch-all" reels. Although you have no use for most of these scenes at present, you may, as will shortly be described, find them very helpful in the future.



He: **"It never occurred to me before, but it's those so-called 'orphan shots' which have slowed down our movie shows."**

So much for the nature of most home movie libraries. We now return to the matter of editing them, and, once more, to the correct equipment—film, projector, screen, paper, pencil, viewer, rewind, and splicer.

As with the picnic reel described at the beginning of this chapter, the first step is to project each reel and jot down a brief description of its contents. The next move is to delete the lengthy sequences which you feel are deserving of individual reels—vacations, sports, big events, and the

like—and then wind them away, as yet unedited, on individual reels.

Then come the "growing-up" reels. Your notes show you what film material you have. Some shots of the children you will want to remain in the family reels. Some will be removed for the formation of each child's individual reel. Study your notes, decide upon the shots which are to be extracted, and mark them on your notes in numerical order. Then, beginning with a leader strip, remove them from their fellows one at a time, splicing them together as you go. Other than discarding poor scenes, do not attempt any additional editing at this point.

What now remains is the material for the general family reels and those few orphan shots previously mentioned. Put checks opposite your notations of this latter group, and then, with splicer and rewind, string them together on another aluminum reel. Now with only the family shots remaining, we are ready to get down to editing practice.

Other than the frequent appearances of different members of your family, these scenes are probably composed of many short sequences of unrelated subjects—the garden, sports in which you engage, week-end journeys—the many facets of everyday existence which you have highlighted in movies. Those widely separated shots at the tennis club—why not bring them together so that they do not pop up unexpectedly between shots of the youngsters, a picnic, that talented girl diver you filmed at the beach, the full glory of your rock garden, and other unrelated cinematic bits? Bring them together, that is, not to be made into an individual reel, but merely to compose a more concentrated sequence of your tennis activities during the summer represented by your family reel.

Making up a typical family reel

The procedure is to again jot down a series of numbers alongside your penciled notes to indicate the new order of things, and the deletions and corrections you wish to make, and once more a leader strip and the splicing block pave the way to better continuity. Perhaps this tennis sequence can be temporarily assembled on one of the black processing reels, easily labeled with a bit of penciled adhesive tape, and be put to one side to be later collated into the family reel. Your next subject may be a couple of dozen scenes of a week-end picnic—another leader strip, a few more splices, and the sequence is wound away on a small reel. One after another, the subjects are selected, your notes numbered, scenes collected and gathered together on short reels. Now they are ready to be reassembled on large aluminum reels.

Perhaps one large reel will hold a year's general filming . . . perhaps only

that of a season. In either case, you have now to decide upon the order of sequences. Assuming that you will start your reel with the beginning of the year, you might follow the leader strip with a shot or two of your New Year's Eve party. Then the tag end of winter sports and some snowy scenics. Next, perhaps, some scenes of rivers and brooks flooded with the departing snow. At this point, if you have had an eye for the homely significance of everyday doings, you may have some shots of storm sash coming down and screens going up. They will be an able substitute for a title. And now comes your garden sequence—from the time you studied the seed and plant catalogs, as the first spadeful of dirt is turned over, and until the plants have grown and blossomed. Next? Perhaps the tennis club sequence. And then the children and their sandbox—for remember, not all shots of the children should be removed to their "growing-up" reels. Following this you might splice on that picnic sequence with which this chapter was inaugurated. Then, quite likely, you'll have some lovely fall foliage in Kodachrome—which again dispenses with the need of a title. Next—the first snowfall to introduce the winter scenes which follow. Then perhaps some sleigh-ride scenes filmed by flare-light. And then several feet of film of a buffet supper and an evening at games. The finale, of course, should be outside and inside shots of Christmas time beginning with the Salvation Army Santa Clauses and their red kettles, and following with pictures of the delivery boys bringing gifts, the tree being secreted in the basement—and carrying right on through to the happy climax of the opening of gifts and the gathering at the gayly decorated dinner table. You'll want to take out some of your holiday shots for the youngster's own reels, but you'll probably have an ample supply from which to choose.



He: "S-a-y—this editing business really sounds worthwhile."

She: "And maybe our films don't need a bit of it, too!"

And there you have a typical family reel, its various sequences separated by bits of opaque film—perhaps in lieu of titles—somewhat abbreviated of course, but cleared of all major sequences promising ample footage for individual reels and of irrelevant "orphan" shots. Now run it through your projector again. A few flaws may present themselves, and if so, they should be corrected. Far more certain is the inevitable glow of satisfaction derived from viewing a reel of smooth and convincing personal movies.

Left unedited are the special subject reels—vacations, sports, and the like. You already have your penciled notations on these subjects, or, if their new order makes a new listing necessary, it will only take a few minutes to jot down a scene-by-scene description. After noting the changes you desire to make, you can quickly effect them with splicer, viewer, and rewind. Too, you will quite often note oversights in the filming of a subject which can be corrected by a few additional shots. A vacation reel, for example—perhaps in your rush to get away, you overlooked making any shots of your preparations, bag packing, and departure. Not that there is anything remarkable about such shots —they merely enable you to present a more complete film story of your



A well taken and edited vacation reel is always interesting. Here are a few of the many fine shots from the deer hunting reels of Mr. Tom D. Park of Tulsa, Oklahoma. We added the two arrows on the fifth movie enlargement to show you the bounding and minute targets of Mr. Park's hunting companions.



Joan Ann Shoemaker, from fourteen days to four years—filmed on black-and-white Ciné-Kodak Film by her aunt, Miss Lucy Shoemaker, Rochester, N. Y.

holiday excitement and enjoyment. So, if your original movie films simply begin at the vacation site, stage a few brief bag-packing close-ups and follow with a view of your car leaving your driveway, train pulling out of a station or thundering around a curve, plane taking off from an airport—or whatever your means of transportation was. It doesn't matter whether it's the same train or plane you took—considerable editorial license is permissible in movies.

Then there are the "growing-up" reels. For these you have no separate list of notes, for they were gathered from here, there, and everywhere. Armed with your new notes, some arrangement other than a strictly chronological order will probably suggest itself. If a youngster is shown admiring a brand new bike or pony and then essaying a first ride, stay with the subject for a while. Pick up scenes made later on, and, splicing them together into one sequence, show his or her growing skill. Do the same with the youngster's introduction to swimming, skating, and other sports, and separate this little sequence with odd shots of the child.

The homemade newsreel

Which leaves but that reelful of memory shots—odd bits of scenery, people, and animals. Many alert movie makers have found them a gold

We've taken the liberty of using eight shots from eight cinamateurs' reels to show how easily odd shots and captions can be assembled into an amusing "newsreel."

Local survey discloses fall crops up to normal



Filmed by Mr. Leslie de Bonnet of Milbrae, Cal.

European couturier fits latest creation to living model



Filmed by Mr. Clifford Nelson of San Francisco, Cal.

Sage predicts business collapse



Filmed by Mr. J. Kinney Moore of West Los Angeles, Cal.

Sun spots probable cause of freckles, says youthful astrologer



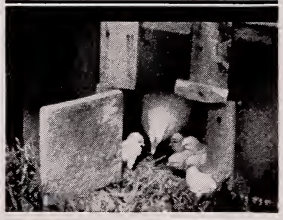
Filmed by Mr. Frank E. Gunnell of West New Brighton, N. Y.

Renowned botanist develops new species of rare blossom



Filmed by Mr. William Tauber of New York City.

Famed mother gives child raising pointers



Filmed by Mr. Owen M. Smith of New York City.

Reckless driving claims two more victims



Filmed by Mr. W. G. Laird of Maywood, Ill.

Gliding expert sets new record



Filmed by Mr. Clifford Paul of Moline, Ill.

mine of material for the preparation of films of the newsreel type. The series of illustrations on the preceding page conveys the idea.

Too much stress cannot be placed upon the really valuable ruse of making extra shots—perhaps weeks or months apart from the filming of the major sequences which they are to supplement—with which to round out the continuity of a subject.

Vacation reels, in particular, can be given added continuity by adopting a central theme to convey progress and to fill in for absent scenes or areas which haste or weather made impossible to film. Close-ups of walking feet—to indicate the amount of ground covered when viewing the wonders of an exposition. Other close-ups of hands and a reel being rewound as a fish line is taken up—to be divided between the many inevitable shots made on a fishing trip when your camera target does *not* catch any fish, thereby making it unnecessary for you to continually ply camera instead of fishing rod and also helping to explain the final shots of the entire catch strung up on lines or poles before your camera.

Not the least among the virtues of these theme shots is the fact that they can often be made after the acquisition of the original shots and spliced in with results which, rather than betraying the filming irregularity, lend the entire sequence greater smoothness.



He: "I feel an attack of movie editing coming on."

She: "Me too. If we both pitch in, it shouldn't take long. Fixing up our movies is going to be as much fun as taking them."

But, before taking up the subject of titles, many minor aspects of film editing should be dealt with in brief paragraphs.

ODDS AND ENDS

Some movie makers follow the editing practice of entirely dismantling a reel into its component shots, and placing the individual scenes on a nail-pegged board, into pill boxes, or even in the compartments of egg boxes—labeling them with brief descriptions attached with paper clips, and then reuniting them in new order. While there are many points in favor of this practice—certainly for those who have separate rooms which can be devoted to editing chambers—it is not recommended for general practice. For one thing, heaven help the practicer of this technic who is called away from his work and loses track of his intended goal, or whose efforts, in his absence, become the playthings of inquisitive children. Far safer, and just as effective, is the sequence-by-sequence technic described further forward in this chapter. Then the number of loose scenes is seldom more than one or two, and all individual sequences are temporarily filed on clearly labeled individual black processing reels.

* * *

Clean hands are essential for film editing, for oily fingerprints are sometimes difficult to remove from film with film cleaner. Some movie makers make it a practice to wear inexpensive cotton gloves—but a handy and frequently used cloth should suffice.

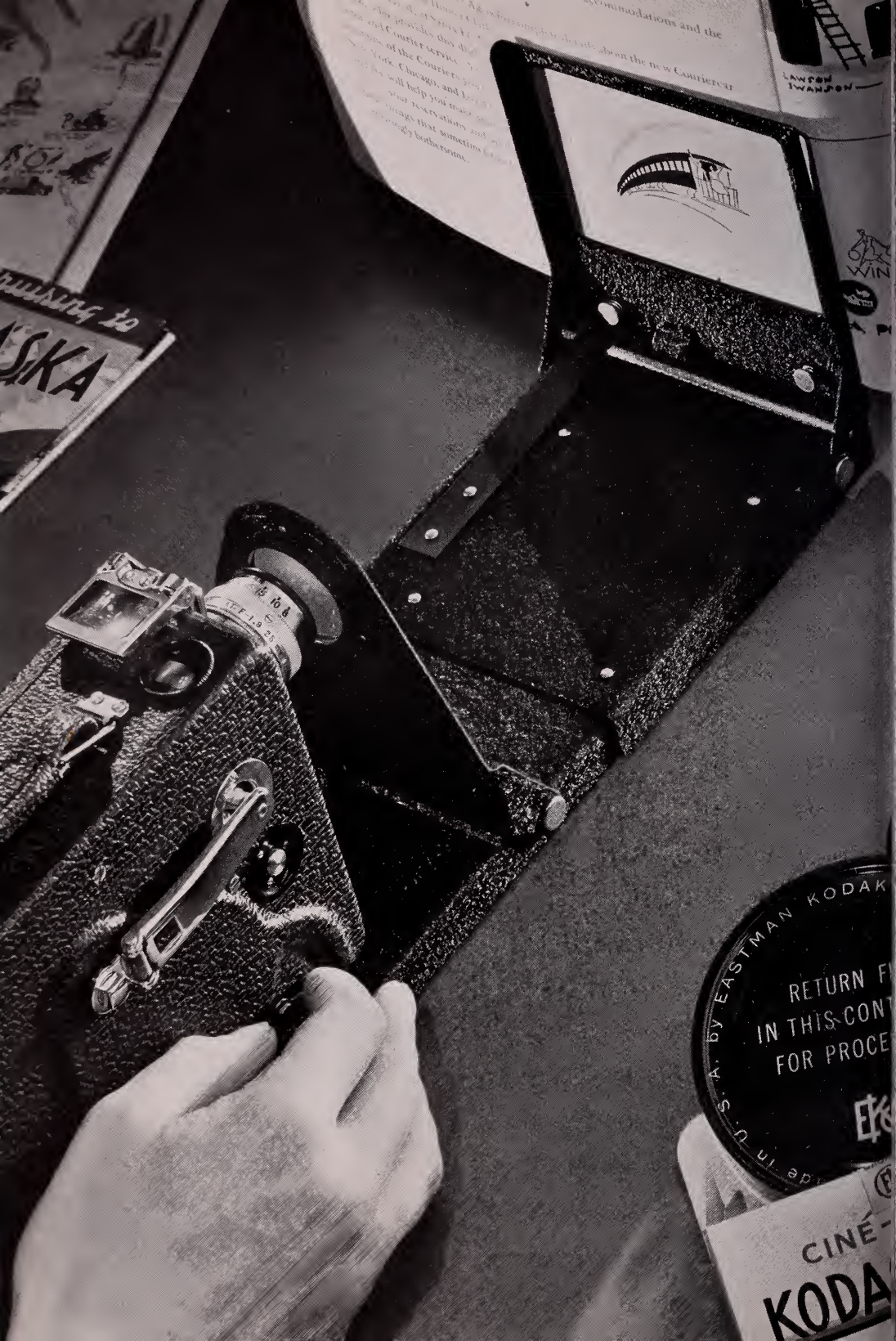
* * *

Don't "cinch" film which has been loosely rewound on aluminum reels. Tightening up loose film by tugging on the leader strip is a guaranteed method of producing scratches. If your projector will not rewind film firmly and uniformly, rewind it by hand on a rewind. This practice has the additional advantages of permitting you to check splices and avoiding delays between the showings of individual reels.

The instructions supplied with splicing outfits make it unnecessary to describe this simple process in detail. But be certain to remove all emulsion from the eighth-inch of film which is to be overlapped in the splice. Do not scrape off emulsion beyond this point or jagged white areas will appear on the screen as splices pass through the projector. Use water on only the emulsion area to be removed—do not allow any of it to come in contact with any other part of the film, or the emulsion may peel. Learn to use just the right amount of cement—only a little is required, for film cement, actually, is not a cement—it is really a solvent, melting or welding the film ends together.

* * *

When splicing films together keep the dull sides of both film ends upper-


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most. The dull side is the emulsion side. The emulsion must be removed from the tip of one film end so that the other film end, when overlapped, will form a compact splice that will not make the image jump on the screen when the splice passes through the projector gate.

All of which is sufficient on the subject of film editing. The next subject, and an absorbing one, is titling.

TITLING

WHILE this chapter will adequately cover the ways and means of preparing home movie titles, its first and foremost duty is to point out when titles are necessary and helpful, and when they are not only unnecessary but also downright injurious.

Yet, even before the need for titles is discussed, your attention should be called to the fact that it is not necessary for you, personally, to make titles. You can have them made for you at extremely reasonable cost by the Eastman Kodak Company. The style of these titles is shown over the page. The uppermost illustration is a typical Ciné-Kodak card title—simple, legible. Ornateness in title making is a temptation to be avoided. These titles are supplied white on black as shown for use with 16 mm. or 8 mm. black-and-white reels. Titles with black type and border on a colored background are supplied for 16 mm. Kodachrome reels. At present 8 mm. Kodachrome titles are only available with white type on a purple-haze background.

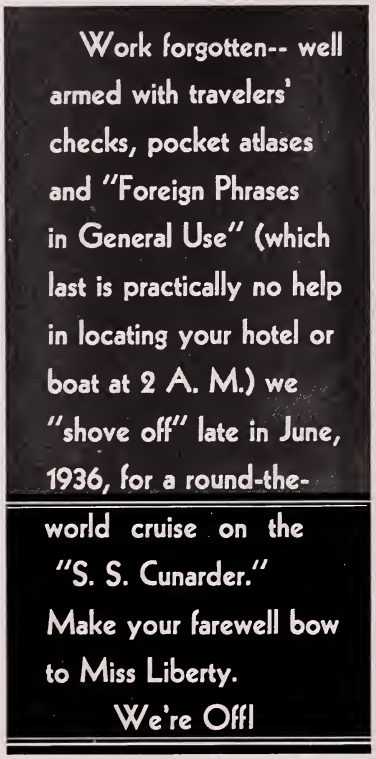
The larger title on the next page shows the Ciné-Kodak Scroll Title available for either 8 mm. or 16 mm. reels. As is evident, the scroll title is ideal for use as an opening title and in other instances where relatively lengthy explanatory comments are deemed necessary. The screen effect of a scroll title is especially interesting as the title runs in a continuous upward movement behind the stationary border.

To those to whom the fun of title making is without appeal, Ciné-Kodak Titles are a simple and inexpensive solution. All you need do is type or print the wording you desire and take this information to your Ciné-Kodak dealer. In a short time the completed film strips bearing your titles will be returned ready for you, or your dealer, to splice into your reel.

Some movie makers, to keep track of where titles are to be inserted,



Simple, legible, Ciné-Kodak card titles tell their story unobtrusively.



Ciné-Kodak Scroll Titles will lend your reels just a touch of professional swank, launch them successfully. The horizontal rule "frame" remains stationary as the wording flows slowly upwards.

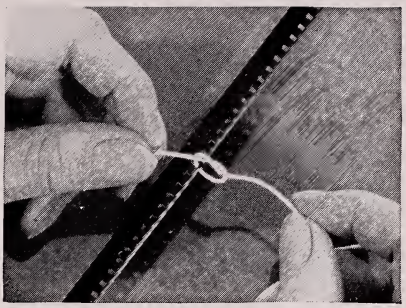
thread perforations with bits of thread or string. Another method is to obtain a roll of Scotch Tape from a drug or stationery store, stick little squares of it on your film, and number these squares in the same order as on the title list given to the dealer. Then, when the finished titles are received, their proper location in your reels is immediately apparent.

WHEN TO TITLE

This query can perhaps best be answered by the seemingly iconoclastic statement—*as seldom as possible*. The perfect home movie is one



without a single title—but, unfortunately, the perfect home movie has yet to be made. An occasional simple and tasteful title will help to explain otherwise puzzling shifts in scenes or subjects, will heighten the curiosity of your movie audiences in the scenes to come, and will indicate the passage of time between your film sequences.



Some movie makers "spot" titles by knotting string or thread in film perforations.

There are those who would have you make an opening title such as "A Holiday Feast with the Johnsons" for that little picnic movie described at the beginning of our chapter on Editing—and then, salt bits of verbiage such as these throughout the reel—"We're off for the Picnic Site," "Ann and Janet Set the Table," "Jim Proves to be an Excellent Chef," "My—but those Steaks were Tasty!" and "The End of a Perfect Day." But after you have seen a series of titles such as these a half dozen times, their inane obviousness will inevitably prompt you to rip them out of the reel and consign them to the waste basket. A simple bit of cinematic continuity such as this picnic episode does not require any titles. You can *separate* it from the other sequences on a large reel by a bit of opaque film to be found at the beginning and end of reels returned from the processing laboratories. You can *label* it a picnic movie by having your first two or three shots devoted to close-ups of hands stowing sandwiches and thermos bottles into a picnic basket. You can *tell* your movie audiences the names of the couple shown with you in the movie. They can *see* that you are leaving for the picnic site in your car, that Ann and Janet spread the picnic lunch, that Jim seems to know what he is about when grilling the steaks, and that you were obviously enjoying the food. Its continuity makes every step of the occasion entirely clear. *It doesn't need titles.*



Others prefer to stick on, and number, squares of Scotch tape.

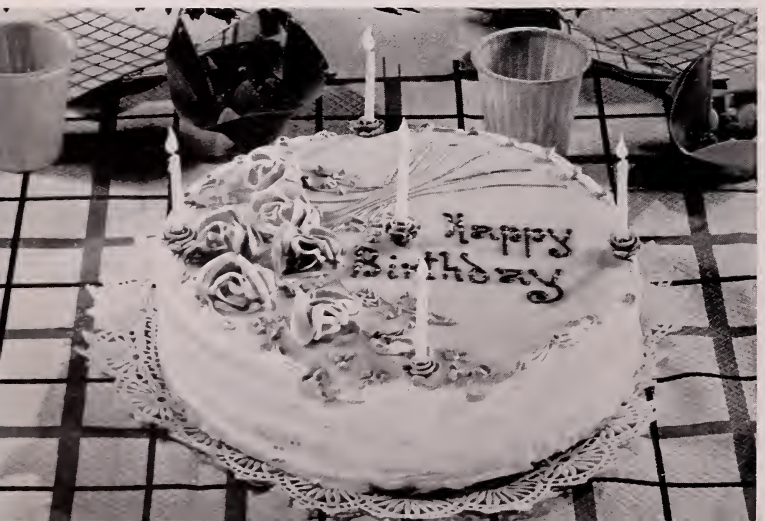
Too, you can often eliminate the need for titles—particularly opening titles—by the making of a little sequence which will not only be an able substitute for a title but a vast improvement upon one. For example—a "Growing-Up" reel of a youngster. The obvious thing to do is merely to



Here's a grand titling shot for the start of a youngster's reel.



If you made a shot like this, no title is necessary to identify the hero of your story, or his age.



But if you missed his fifth birthday, you can title it now merely by filming a five-candled cake.

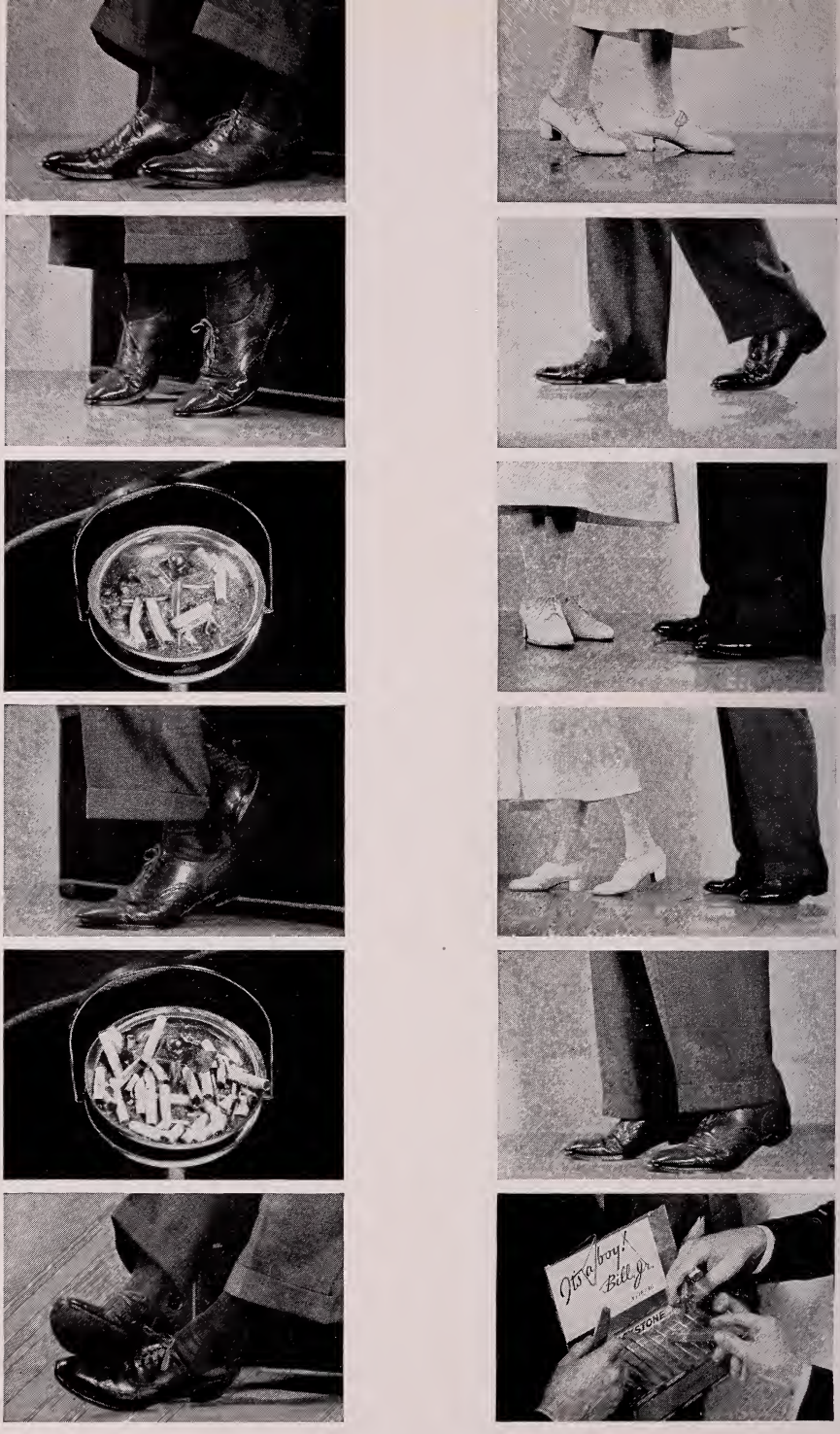
make, or have made, an opening title such as "The Movie Diary of Bill Junior"—and then splice one scene to another until Bill Junior's film chronology has been brought up to date. But far more interesting is the plan of *titling by implication;* of starting your film diary of him with a shot of him clutching an aluminum reel of film in his chubby hands and perhaps vainly attempting to engage the core of the reel with the upper spindle of your projector. This scene titles it as *his* reel and prepares your movie audiences for the shots to follow. And, if you've a scene of him made on his first filmable birthday as he puffed out his cheeks to extinguish the candles on his birthday cake, splice this in immediately after the initial title sequence to indicate the year in which his film diary was begun. If by any chance you didn't make such a shot of him, get a cake now, spear it with the proper number of candles, establish your camera as close to the cake as possible, press the exposure lever, and with your head alongside, but not in front of, the camera's lens, blow out the candles yourself.



He: "This titling-by-implication idea certainly makes sense."

She: "And think how much better it is than a plain title."

You can go this plan one better if your movie story of him starts with his earliest days on this earthly sphere. Here's a little sequence that can be made now, even though it is months or years after the big day of his arrival. A close-up of the father's feet nervously striding back and forth in a restricted area . . . a spent cigarette being tamped out in an ash tray . . . another shot of the feet . . . another cigarette . . . again the feet, moving still more rapidly . . . an overflowing ash tray . . . once more the feet—they stop, and whirl about . . . a door opens, and a pair of women's white shoes appears, pauses a moment, then turns and vanishes beyond the closing door . . . the man's shoes have lost their evidence of anxiety and are now seen to



Certainly this sequence would get a youngster's reel off to a good start. There are few subjects which cannot be "titled" by such sequences.

rock back and forth complacently from heel to toe . . . a series of close-ups of hands extracting cigars from a brimming box carrying a card which, in a titling device close-up, is seen to read, "It's a boy! Bill Jr. 3/16/36"—and then the first close-up which you made of the youngster in his mother's arms in the hospital. You can make the hospital corridor part of this sequence on a stretch of rugless floor right in your home, and, to borrow a phrase from our professional contemporaries, it is guaranteed to "wow" your every movie audience.



He: **"Let's make this bit right now? We've got shots of our Billy from the time he was 24 hours old."**

She: **"Let's do it! That's all his movie needs to be just perfect."**

To further illustrate the use of titling sequences: Suppose, for example, your youngster spends a few weeks at a summer camp at which you make a roll or two of movies upon a visit—you will quite naturally want to precede these camp shots with a title to explain their locale and significance. And here, again, you can title the sequence in a manner unusual from a cinematic standpoint and yet more true to life. Instead of the obvious title, "Happy Days at Camp Gagawhayamacallit," lead off with a little sequence showing you receiving a letter or card from the postman (or taking it from the mailbox), opening and reading it, and then, in a titling device close-up, reproduce a line or two from it in which the youngster reports ". . . having a perfectly swell time swimming, canoeing, hiking, riding horseback. And don't forget—I'm expecting you at Camp on Parents' Day."

And what better way to launch your reel devoted to home and family than with a close-up of the house number, followed by another close-up



of your street sign, and then a medium shot of your house?

Begin your garden sequence with a close-up made over your shoulder as you study a seed catalog.

Title your golf or tennis club reels with close-ups of the club sign.

And you can title a sport or spectacle by using all, or part, of a program of the event as title material. Too, if it is reviewed by the local press, a paragraph by paragraph copy of the news article can be made by a titling device to identify individual scenes.

But all reels and all subjects cannot be titled by implication. This is especially true with travel reels. Unless you are willing to maintain an endless descriptive monologue or risk leaving your audiences all at sea in regard to the location and significance of the sights and sites you have filmed, titles are really a necessity.

This does not necessarily mean that the grooming of a travel film calls for considerable title making. Highway signs, station names, monument inscriptions, building plaques, life preservers on steamships, airline names on planes—these are some of the ready-made titles you can film while afield. And you can bring back with you highway, steamship, and airline maps, postcards, and, if you journey abroad, colorful travel literature which generally abounds with material easily adapted to title making.

Never overlook ready-made titles such as these. They tell you where you are as you make your movies, and they'll tell your audiences where you were when they see them.



He: "H'm. And you chided me for shooting so much film on trail signs to title our Yosemite film last year."

She: "Oh hush—I never thought of them as titles."

Here, however, is a review of the occasions when titles *are* necessary.

A showing of your reels is likely to disclose gaps in your film story which, to those not familiar with your movie subject, will seem inexplicable. These gaps, if they cannot be corrected by editing, can almost invariably be smoothed over by titling. If, for example, during an automobile tour of New England, weather conditions made it impossible for you to film one day of your journey, you can make a simple title such as "*A day long downpour washed away our chances for picture making between——— and———.*" This title, spliced into the vacation reel in the middle of a shot (which you can just as well make when you return home) of distant storm clouds and lightning seen through spattering drops on your windshield, will go a long way toward eliminating an unfortunate gap in your movie itinerary.

You will often want to build up a scene by an interest-arousing title. Perhaps your movie subject has been the graceful performance of a skillful diver, following which you were fortunate enough to film the elephantine grace of an overfed amateur. Certainly the comedy aspect of this latter shot would be heightened if it were preceded by a title such as "*Another heavy favorite for diving honors.*" And if your subject is some mighty spectacle of nature such as Niagara, and your home movies of it are so blessed with continuity that they lead your audiences to the brink by a series of shots made above the falls, added punch can be given your protracted shot of the cataract if you precede it with a title such as "*The majesty that is Niagara*" and split your deservedly long shot of it with another brief title, "*1,500,000 gallons a second!*"

Then again, if you devote one large reel to a thorough-going film record of one subject, you will often want to break up such a lengthy series of scenes with a title or two. Place them in your reel where the scene of action shifts from one location to another. Perhaps, on a fishing trip, you

have devoted three or four minutes to the sport you enjoyed while casting along a rocky shore. Drop in a close-up of a snarling outboard motor, follow this with a shot or two of your new location, and then "*Bass drowse away the afternoon beneath these placid lily pads*" . . . next a shot of a "strike," the landing of a fish, and another title, "*But a Buffalo spoon is a guaranteed eye-opener!*"—and then follow along with your other fishing shots.

PHRASING TITLES

Although the style of the titles used somewhat determines the number of words your titles can carry and still be legible on the screen—a plain card title quite naturally permits the use of more words than an art title in which considerable area is devoted to design or illustration—there are lengths beyond which you should not go if you expect your movie audiences to retain the information carried by the titles. The 16 mm. card title illustrated on page 192 is sometimes ordered with 30 to 35 words; 8 mm. Ciné-Kodak card titles with 20 words. But the fewer words in which you can express the information you wish to impart, the better and brisker your film story will be.

Ciné-Kodak Scroll Titles, also illustrated on page 192, can, of course, contain far more than 35 words if the situation demands a lengthy title. Scroll titles are for those exceptional instances when there is much to be said in a title, and you wish to say it in the most interesting fashion.

Phrase your titles simply. Do not try to impart to every title an air of vast sophistication or shrewd wit. Your audiences may not share your appreciation of such grammatical niceties. And, frankly, you will probably find yourself inclined to agree with them after you have viewed such titles a few times. Words have the knack of coming into their own in titles. Without inflections of voice, without the benefit of mannerisms, they must stand on their own feet. Furthermore, a title should never interrupt a film story, which it is quite apt to do if its tone is out of keeping with that of the cinematic situation into which it has been dropped for the sole purpose of making it clear and not more complicated. A reel is well titled when onlookers read and remember the information carried by titles without being conscious of them.

More than a few movie makers who have not given an overabundance of forethought to the filming of their reel, nor too much after-thought to the editing of the material they filmed, try to "pep up" a commonplace film story by needling it with a host of tricky titles—with a net result not dissimilar to that which would be obtained if a Broadway gag-writer were put to work to add zip to an eighteenth century tear-jerker.

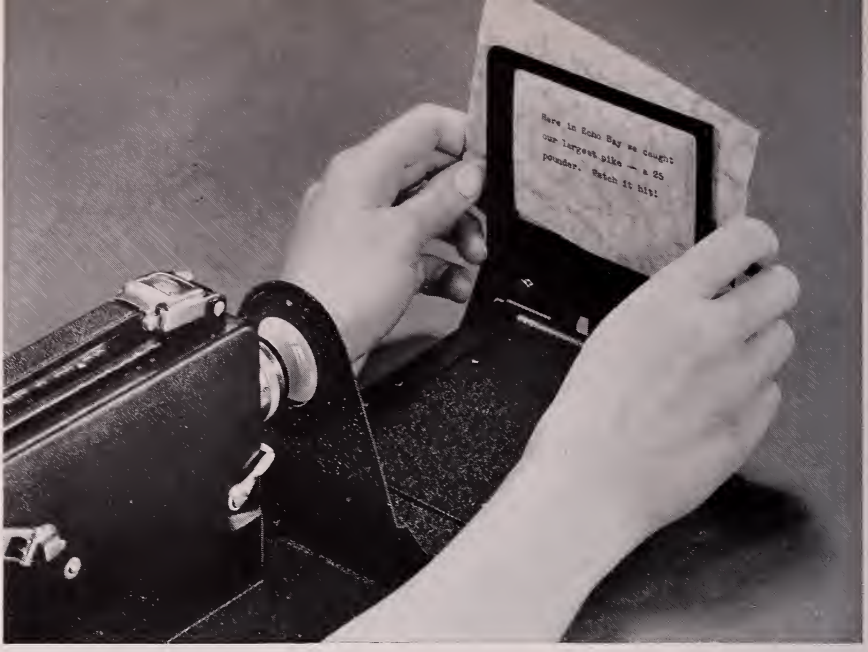
Don't overdo titling. Never refer in a title to a scene which has just been viewed—title the ones to come, or your movie audiences will miss the action before them on the screen while they are mentally back-tracking to connect a title with the scene, or scenes, which preceded it. Be impersonal. Think of your film subjects from the angle of those who will see them. *You* are thoroughly familiar with your reels. But those who are not must depend upon the thoroughness of your camera's work and the clarity of your title phrasing. If the essence of title making were summed up in one word, that word would be "simplicity." Although opening and closing titles can safely lean towards decorativeness, keep your titles simple after you have once launched your film story.



MAKING YOUR OWN TITLES

It would not be difficult to fill a book the size of How to Make Good Movies with suggestions on title making, alone. But, as one of the first factors to keep in mind in this pursuit is the deliberate avoidance of a distracting variety of title styles, our suggestions on title making will largely be confined to those applicable to inexpensive titling devices such as Ciné-Kodak Titler.

Time was when home movie titling, though great fun, was something of a task because more than a few minutes' work was required for the



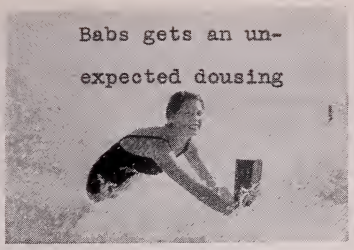
Even those who type by the "A-where's-B" method, uphill or down, can make good titles with Ciné-Kodak Titler.

preparation of a title worthy of your movies.

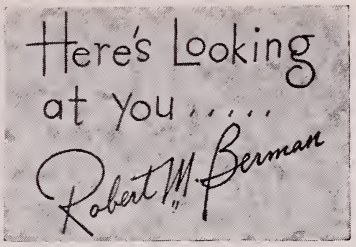
Now the Ciné-Kodak Titler has changed all this. All Ciné-Kodaks (with the exception of the original Model A and Ciné-Kodak Special), whether 8 mm. or 16 mm., need only be properly placed upon the Titler's base, and correct alignment of camera and card is assured.

But it is the Titler's auxiliary lens that really spells the end of title problems. This auxiliary lens makes ordinary typewriter type, filmed only a few inches distant, appear clearly legible on the screen, and thus writes finis to the need for hand lettering. Not only this, but the screened title does not betray the faulty technic of even the veriest "hunt and peck" typist. The typing may stray from the center of the title card, run "uphill" or down, yet by merely centering the typing in the Titler's easel, the effect on the screen is consistently flattering.

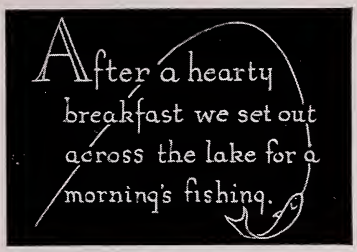
The Titler can lay claim to versatility as well as to simplicity. To this statement the several title effects on the next page bear potent witness. You can type your titles directly on one of the 100 mottled-background cards supplied with each Titler. You can type them, as well, directly upon the lighter areas of dull-finished snapshot prints, on wallpaper with a minute pattern, on strips of light paper which you can paste over snapshots or onto postcards. You can clip illustrations from newspapers, magazines, and advertising literature, and, by either typing or hand



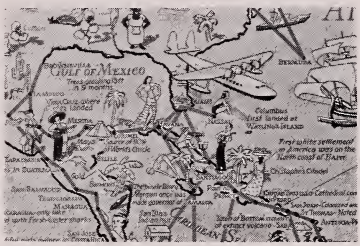
Typing on a dull-finished snapshot.



Autographic title to introduce characters.



Simple lettering and a sketch on black show card stock.



Map from cruise folder. You can indicate locale with pencil.



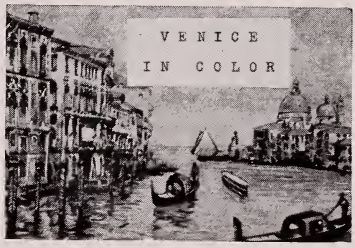
Typing on wallpaper.



A more ambitiously sketched and lettered title.



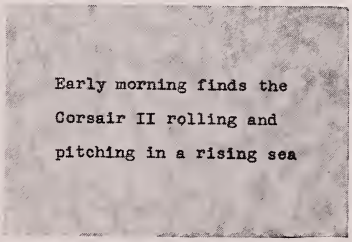
Typed strip pasted on snapshot.



A typed strip pasted across a postal card.

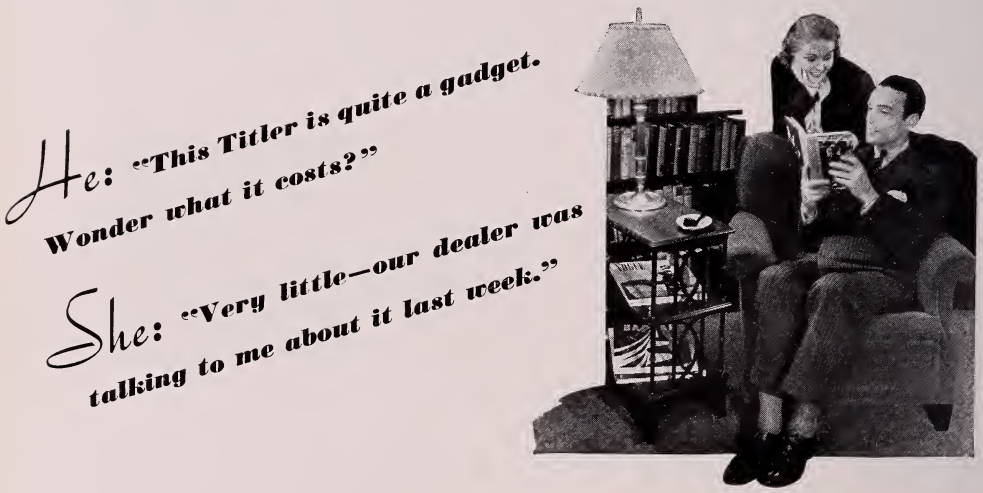


Lettering on illustration from cruise folder.



Straight typing on one of the Titler's standard cards.

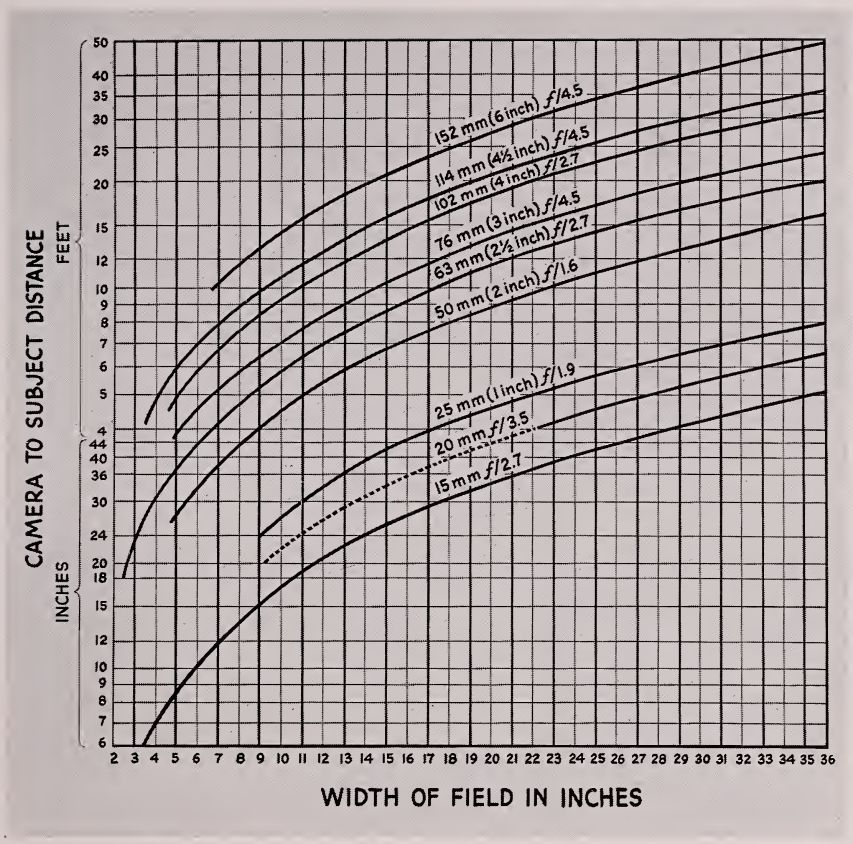
lettering, obtain attractive art titles. You can use newspaper stories of events to title your films of the news described. You can give expression to your bent for cartooning and prepare amusing title effects with white drawings or lettering on black paper. You can use road maps or cruise folder maps and, by showing one section at a time, trace your route by pencil point from town to town or from port to port. You can, in fact, have an enlargement made of a frame from the very scene you wish to title, and type or letter your title directly upon the inanimate version of the scene which, as soon as the title strip has passed through the projector, will suddenly spring into life in its movie version. There is no need here to go into detail about the use of Ciné-Kodak Titler. This information is given with the instructions supplied with this handy accessory.



Yet, despite the extreme efficiency and simplicity of a titling device such as Ciné-Kodak Titler, there will sometimes be occasions when you will prefer to use titling material with a far greater area than that covered by the auxiliary lens of the Titler.

Such extra-size titles can be filmed successfully by most fixed-focus and focusing movie cameras.

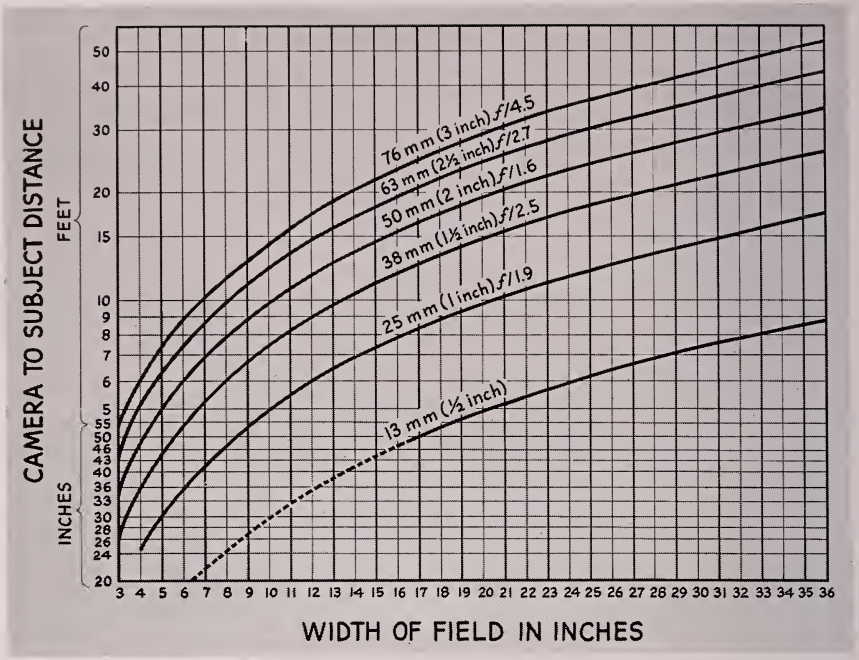
Owners of the 16 mm. Magazine Ciné-Kodak, Ciné-Kodak Model K, and Ciné-Kodak Special, will find on the page opposite a graph showing the size cards necessary for filming with the above focusing-lens type cameras at lens-to-subject distances ranging from six inches to forty-nine feet.



Here's how the graph works. If, for example, you are using a 25 mm. lens and wish to copy an old portrait 11 inches wide, put a pencil point on the "11-inch" line at the bottom of the graph and follow this line up until it hits the curve for the 25 mm. lens—then move across to the left border. You thus learn that 30 inches is the focusing distance. Or, with the distance set, field size is learned by reversing the procedure. Movie frame proportions, incidentally, are 4 inches wide by 3 inches high.

While *How to Make Good Movies* is no purveyor of "pie charts," a time-saving computator such as the graph above is too important to omit. Its use really is simplicity, itself.

Smallest apertures are desirable for closest focusing distances with all lenses. Under average lighting conditions (*f*/5.6, for example) 20 mm. *f*/3.5 lenses on fixed-focus cameras cannot be used to film objects much closer than four feet. At closer range, a 75 cent portrait attachment in a Z mount is the answer—see dotted line in graph above for the added range permitted. Brilliant light permitting small apertures is desirable.



This graph is read by the same technic described on the previous page for 16 mm. cameras. The curve given for the 38 mm. (1½ inch) *f*/2.5 lens can be followed for the 1½ inch *f*/4.5 lens supplied for the Ciné-Kodak Eight, Model 60. The curve for 13 mm. lenses can be followed for fixed-focus cameras such as Ciné-Kodaks Eight, Models 20 and 25, from 4 feet down to 20 inches (see dotted line) by using the 75 cent portrait attachment in a Z mount. The 13 mm. *f*/1.9 lenses on Ciné-Kodak Eight, Model 60, and the Magazine Ciné-Kodak Eight, while only focusing as close as 24 inches, can be used up to 14 or 16 inches at the smallest apertures.

How To Center Titles For Filming

First, buy yourself a drawing board (you may use a bread board if you wish), and locate its exact center by drawing two lines across the face of the board from opposite corners.

Next, construct a support for your camera (one or two empty cigar boxes, or blocks of wood, may be all you need) to raise your camera so the center of its lens will be exactly the same height from the table on which you are filming your titles as the center point on your title board.

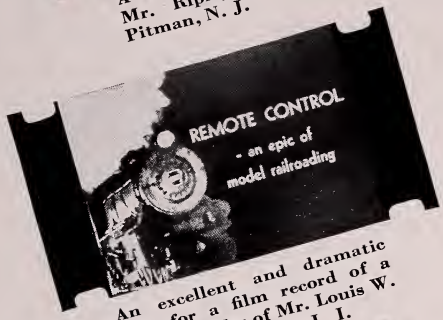
Draw a line on the table from the mid-point of your title board and at right angles to it. Place your camera so that its lens is directly over this line at a distance recommended in the above table, or, if you are using the "Z" Portrait Attachment, at a distance specified in the instruction sheet included with this accessory. Remember that your camera's lens



A subtitle from "Trees," by Mr. Ripley W. Bugbee of Pitman, N. J.



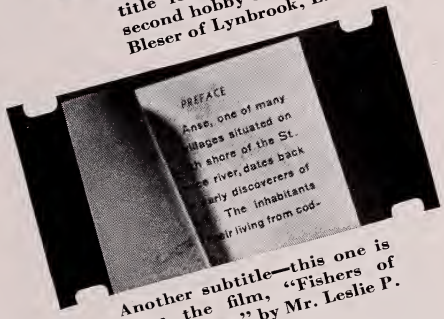
A simple and effective title from one of the splendid travel reels of Mr. Ralph E. Gray of Mexico City.



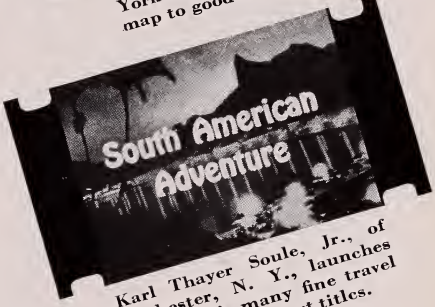
An excellent and dramatic title for a film record of a second hobby of Mr. Louis W. Bleser of Lynbrook, L. I.



Mr. Kenneth F. Space of New York City used this animated map to good effect.



Another subtitle—this one is from the film, "Fishers of Grand Anse," by Mr. Leslie P. Thatcher of Toronto.

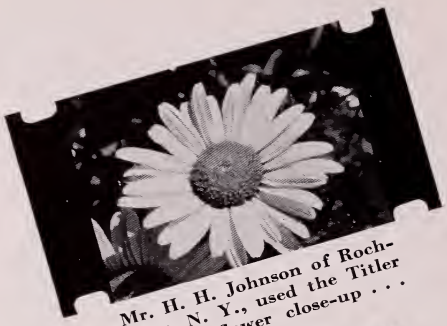


Karl Thayer Soule, Jr., of Rochester, N. Y., launches each of his many fine travel reels with fitting art titles.

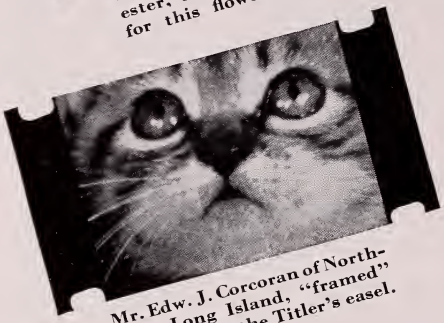
should be in the center of your title. For, with extreme close-up work, the finders, intended for average shots, are not safe guides for vertical or horizontal sighting.

Timing Titles

At about this point the question of how much film to devote to a title will quite naturally arise. It depends upon the title. If you are filming a plain typed title, press down the exposure lever, and keep it down, as you slowly read the title—then stop exposure. But if your title boasts of illustration, as well as wording, give your screen audiences a chance to admire the title by allowing it a few additional seconds. Such technic, and such titles, are best placed at the *beginning* of a reel, and titles of wording, only, *throughout* a reel. "Art" titles tend to slow down a film story if



Mr. H. H. Johnson of Rochester, N. Y., used the Titler for this flower close-up . . .



Mr. Edw. J. Corcoran of Northport, Long Island, "framed" his kitten in the Titler's easel.

used throughout. And *never* vary the style of titles throughout a movie of one subject.

Don't run two titles together. *Dick hooks a whopper* should not be immediately followed by, *But it got away.* Show "Dick" playing his fish in between titles.

Before concluding this chapter, mention should be made of the effectiveness of the Titler in making extreme close-ups of objects other than title material. When no card is placed in the Titler's easel and it is used as a frame for objects on the same plane, tremendously interesting close-ups can be obtained of otherwise minute objects. The wide-eyed stare of a tiny kitten—imagine how dramatic it would be when filmed in this manner so that it fills your entire screen. Or maybe your camera is loaded with Kodachrome and you wish to make an unusual shot of a pet canary splashing about in his tiny porcelain bath on the side of his cage . . . or of the lazy and graceful maneuvers of a brilliant goldfish on the camera side of an aquarium. If the subject must, of necessity, be a half inch or so more distant than the plane of the Titler's easel, set your camera's focusing scale—if you use a focusing camera—at the "100" foot marker instead of "25."

Blossoms can be magnified so that their tender petals will flare across your screen in bands of striking colors. Butterflies with all their kaleidoscopic coloring can stretch their wings from one side of your screen to the other. Weird insects can waggle their antennae at your movie audiences in awesome magnitude. A California cinamateur produced a prize-winning movie of his garden by the simple expedient of making all of his scenes (after the opening medium shot of his garden) through the Titler's easel. He framed one blossom after another in the easel, produced magnified screen images which presented the blossoms far more clearly and far more beautifully than they were in life.

More than a few movie makers, who acquired their outfits too late to include early shots of their youngsters' childhood, have filled the gap

by centering old snapshot prints in the Titler's easel and copying these inanimate, yet precious, likenesses on movie film. Trinkets, jewels—in short every small object which you would deem more interesting when greatly enlarged is fair game for a Titler.

CLEANING FILM

One of the simplest of the steps insuring the finest screen showings—and certainly not the least important—is the periodic cleaning of your film with an approved film cleaner.

When film is edited and titled,

Both the film strips at the right may seem equally free from scratches and smudges. One print was made from soiled film, one from the same film after cleaning. The same frame was enlarged before and after—see below.







Projected films should regularly be wiped off, occasionally cleaned with a film cleaner. The efficient outfit pictured here costs very little.

thumb prints, bits of cement and dust particles will inevitably find their way onto its surface. Even in ordinary projection, film will pick up dust and perhaps an occasional splatter of oil from the projector. Abrasive agents of destruction will lodge in the gate of your projector and evidence their presence and effects by black, vertical streaks on the screen—film scratches which no cleaning preparation can eradicate. Grease or oil spots will be mirrored by discoloration of color film images and by blobs of off-tone gray on black-and-white images. The simple and certain solution is the use of film cleaner. But do *not* use a "spot remover," or any of the other household cleaning fluids on the market. These, though undoubtedly efficient in the fields for which they are intended, are sometimes deadly indeed when used upon movie film—oftentimes discoloring black-and-white film, and completely destroying the colors of Kodachrome. The fluid supplied with the Ciné-Kodak Film Cleaning Outfit, which also includes a soft plush cloth, is, however, especially refined by Eastman for film cleaning. To clean film, place it on a rewinding device and thread the leader strip onto a take-up reel. Moisten the cloth with Ciné Film Cleaner. Squeeze it until there is barely any moisture left in it. (This is especially important when cleaning Kodachrome.) Slowly draw the film through the cloth, exerting only a slight pressure. If the cloth is held near the full reel of film, the film should be sufficiently dry by the time it reaches the take-up reel.

A glance at the cloth after you have cleaned 100 feet of frequently projected film will convince you of the importance of film cleaning. And a glance at the screen as you show the cleaned film will demonstrate its benefits.

DUPLICATES

The very reels you prize most highly, show most regularly, will be the first to show signs of wear from projection. Clean film and a clean projector will, of course, help greatly to forestall the evil day.

And, although far more infrequent destroyers of film than popularity,

theft and fire occasionally bring irreplaceable loss to movie makers.

The easy, inexpensive escape from loss by wear, theft, and tear is the duplication of your best reels.

Run through your film library some evening soon—surely there are sequences in it worth their weight in gold to you. Strip them out of their present locations and collate them on large aluminum reels. Then take them to your dealer for duplication in Eastman laboratories. When your film has been returned to you, you can store the originals in vault or safe deposit box; project the "dupes."

All black-and-white film, 8 mm. or 16 mm., can be duplicated. Both 8 mm. and 16 mm. Kodachrome Film can also be duplicated—8 mm. in black-and-white, 16 mm. in either full color or in black-and-white. Important to remember is that a duplicate should be projected with the glossy side of the film toward the projector lens.

STORING FILMS

Ciné-Kodak Films should not be stored on the black metal reels on which they are returned from the processing laboratory as these reels are not rust proof. Rather, processed films should be spliced together, wound onto aluminum reels, and stored in Kodascope Film Cans for safe keeping.





Never "cinch" loosely wound film in this manner—there's no more certain way to produce scratches.



Home movie films are valuable—more valuable with the passing of every day. They deserve better care than they are being given in the illustration above.



Some film cans contain humidifying pads but these need seldom, if ever, be moistened. Under normal projection conditions, home movie film will absorb sufficient moisture from its occasional exposure to air to remain suitably pliant.

Films should be kept where it is dark, dry, and cool. They should not be stored near radiators, steam pipes, or hot-air registers. A temperature of not over 70° and a relative humidity of not over 50 per cent are recommended.

In the event that Ciné-Kodak Films become dry and brittle, they can be restored to normal projection conditions by storing them for a day or two in a covered receptacle containing a dampened sponge. If coiled loosely, the humidification will be more rapid and even. Care must be taken to see that the films do *not* come in contact with the dampened material.

ENLARGEMENTS

Here is a phase of home movie enjoyment as yet appreciated by relatively few movie makers. Yet every cinamateur with a still attachment on his projector has made frequent use of it to halt the flow of film for

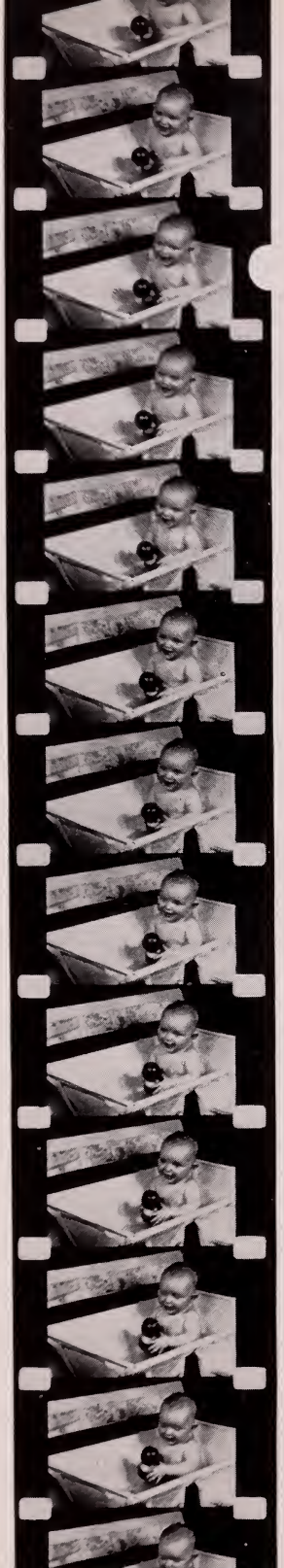
the prolonged enjoyment of that precious fraction of a second in which a film image of a youngster's lively countenance has registered the very expression so endearing to those close to the child, or to satisfy an appreciative gasp from a movie audience caused by the screen debut of some lovely scenic. You, yourself, have undoubtedly often exclaimed, "How I would like to keep a picture of *that!*" And you can. If your shots match in crispness those from which many of the illustrations in this book have been made, you can then have enlargements in every way their equal.

Close-ups enlarge best

Close-ups, quite naturally, promise best results. Yet distant scenic shots possessing contrasting lighting and with attractive sky and cloud effects are entirely practical subjects for enlargement. Shots in which rapidly moving objects appear, however, are generally impossible to enlarge—which may seem odd in view of the abilities of your movie camera to reproduce action on the screen. The explanation, however, is quite understandable. Operated at the normal speed of 16 frames a second, your movie camera gives each individual film image approximately 1/32 of a second exposure—the camera shutter being open about half the time for the recording of action, and closed the other half for the mechanism to pull one film frame out of position from behind the camera's lens and replace it with another. Movies are generally shown at this same speed of 16 frames per second. And so, with every screened movie shot of a runner, for example, you are actually viewing a vertical parade of 16 snapshots a second, which gives the illusion of continuous action. That this is but an illusion you will quickly discover if you scrutinize an individual movie frame with a magnifying glass or upon the ground glass screen of a viewing device. The runner's fast-moving legs will appear quite blurred—for 1/32 of a second is obviously not sufficiently "fast" exposure to stop rapid action. This handicap does not, of course, hold true when rapidly moving objects are filmed in slow motion.

Yet certainly with forty individual snapshots on each foot of 16 mm. film, and eighty to each foot of 8 mm. film, there must be many irreplaceable views which you, or someone you know, would give much to have in the form of attractive enlargements for snapshot albums or mantel. You can have them made for you by Eastman, whether they are on 16 mm. or 8 mm. film, black-and-white or Kodachrome, or, if 16 mm., you can make them yourself—see page 216.

The size to which film images can be magnified depends upon the type of film used and the nature of the subject filmed.





A child or adult will strike exactly the expression you so greatly covet once in almost every shot. The nicked frame (third from top) in this enlarged film strip is typical—and above you see how nicely it enlarged.

Although 8 mm. images are not usually enlarged beyond the seemingly modest proportions of $1\frac{7}{8}$ inches by $1\frac{5}{16}$ inches, it should be realized that this area represents a 100 times magnification of the original film images. 16 mm. images, being four times as large as 8 mm. images, are generally magnified to 3 by 4 inch proportions.

Exceptionally clear images, of course, can be enlarged to a more generous size. But as a rule prints are made in the sizes given above and in the manner described below.

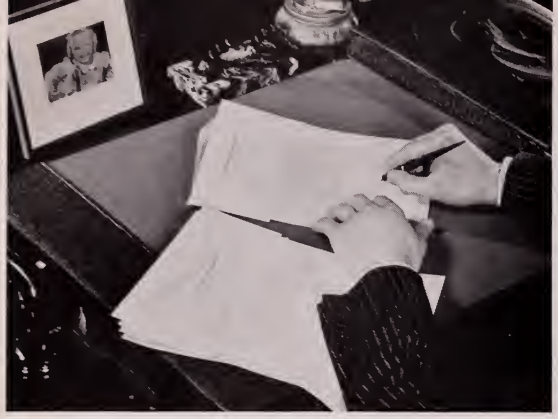
Thoroughly satisfactory glossy enlargements may be obtained with a small white margin similar in appearance and finish to everyday snapshots—as is illustrated by the reproduction of the 16 mm. film image on the next page. Or, as many movie makers rightly prefer, movie enlargements may be obtained in the style of the slightly higher priced, but far more attractive, Etchcraft Junior enlargements made on embossed, dull-finish paper with a wide margin. An actual size reproduction of an 8 mm. Etchcraft Junior enlargement is also shown on the next page.



Above is a typical 16 mm. glossy enlargement, made from the reels of Mr. Ralph C. Wildes of Haverhill, Mass.



At the left is a standard Etchcraft Junior enlargement from the 8 mm. films of Mr. Thomas Stob of Chicago, Ill. With 16 mm. Etchcrafts the picture area is 4 inches wide by 3 inches high; the overall size, 7 by 6½ inches. Unusually sharp 8 mm. movie shots can also be enlarged to these proportions, and 16 mm. shots to even greater size.





Framed Etchcraft Junior enlargements are easily large enough for use on desk, end table, or mantel — yet pleasantly unobtrusive. They make ideal gifts for friends and relatives.



She: **"These enlargements would be just the thing for our mantelpiece and my dressing table."**

He: **"And my desk."**

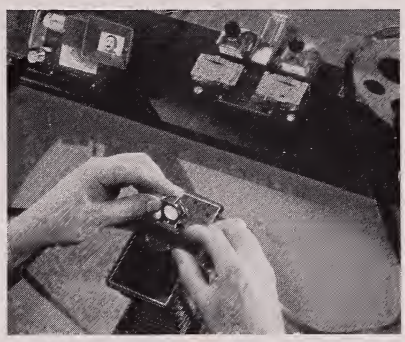
If you are interested in this somewhat unusual, but thoroughly important branch of home movie enjoyment, have your dealer send your film to the Service Department of Eastman Kodak Company, Rochester, N.Y., with light colored string or thread tied through a perforation alongside each image you desire enlarged. This department will advise you as to the likelihood of successful enlargements and give you an estimate on the modest expense involved.

MAKING YOUR OWN ENLARGEMENTS

The Kodak 16 mm. Enlarger makes the obtaining of black-and-white enlargements from 16 mm. black-and-white or full-color film as easy as

rolling off the proverbial log. You merely locate a frame from which you would like an enlargement, clamp it in the "gate" in front of the Enlarger's lens, point the gadget at a Photoflood bulb, and press the exposure lever. Then you wind the 616 film in the Enlarger until the figure "2" indicates that the first exposure has been rolled out of the way, clamp a second movie scene in the "gate," and again click the exposure lever. And so it goes until the eighth exposure has been made on an inexpensive roll of Kodak snapshot film. At this point you take the film to your dealer for developing —and in a day or two you'll have prints the size of the one shown on the next page. It's really as easy as that.

A word of advice, however, on the type of shots from which to attempt enlargements.





Making your own enlargements is fun. It's best to attempt it with a rewind and viewing device such as the Kodascope Rapid Rewind and Viewer shown on this page. You locate the best "frame" on a movie scene in the Viewer's ground-glass screen, make an identifying nick in the film edge with the Viewer's marking device, slip out the film and clamp it in the Enlarger's gate. Then you point the Enlarger at a Photoflood bulb and press down on the exposure lever for a few seconds—the length of time varying with the density of the image, as described by the Enlarger's instruction sheet.





In almost every movie scene you will obtain just the viewpoint, or just the expression, that has often caused you to say—"How I wish I had an enlargement of *that*." The enlarged movie frame at the left, as "blown up" by the Kodak 16 mm. Enlarger, is just such a shot.

No better guide could be given than the many enlargements from movie film to be found in this book. Select scenes of simple composition, subjects offering contrasting tonal values, and, to repeat, close-ups. They can be from black-and-white or Kodachrome Film. 16 mm. Kodachrome, in fact, permits the best black-and-white "stills" of all.

After you've obtained your standard glossy prints you may likely find one or two of more than average appeal from which you would like especially attractive enlargements, perhaps of greater proportions, to send to relatives and friends, or to frame for use on desk or mantel. Your Ciné-Kodak dealer will advise you as to what type of prints to order and whether or not your negatives will permit further enlargement.

SHOWING MOVIES

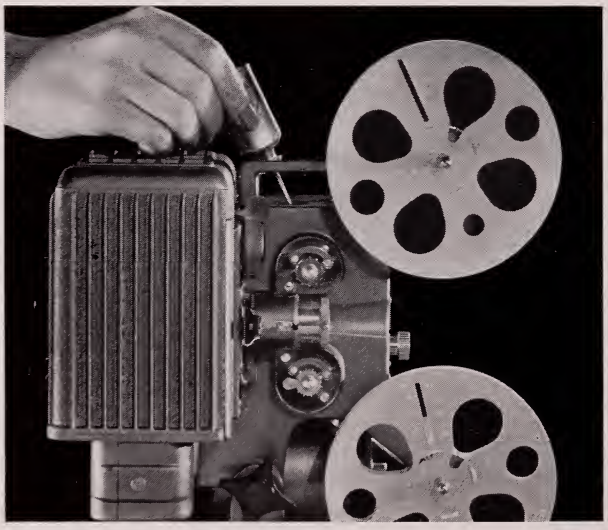
ASSUMING, due to the benefits of editing and titling, that your films are ready to put their best feet forward, all that now remains is to consider the few simple yet most important factors that will enhance or somewhat nullify the good work you have done with camera, splicing block, and titling device. And, as the first subject in the discussion of the making of movies was the camera, so is the projector now of foremost importance.



Home movie projectors require very little attention from their owners. But, unfortunately, many movie makers give them no thought whatsoever after they have mastered the few mechanical aspects of their use.

There are two separate and distinct responsibilities of any projector which it cannot discharge to the best of its ability without a bit of attention now and then from the operator. Your projector must function with extreme mechanical precision if it is to pull the film off the upper reel smoothly—and then, at the conclusion, rewind it rapidly and uniformly. Too, throughout the first stage of this performance, it must play a brilliant beam of light onto, and through, your film images so that they look their best when they reach the screen.

Unlike cameras, which are generally designed to function without the attention of lubrication (a practical plan in view of the effect of temperature extremes upon lubricants) a home movie projector requires occasional applications of oil. As its mechanism is extremely precise, it takes a very fine grade of oil—and you should use the lubricant recommended by its manufacturer. It does not require much oil, nor does it require frequent applications of oil—but it was never intended to run without oil. More than one movie maker who has wrathfully plunked his projector upon the showcase of his dealer with the statement that, "The —— —— machine sounds like a —— —— threshing machine," has readily confessed that, since its first purring performance in his home, it has never been blessed with the benefits of a single drop of oil.



The manual supplied with each projector thoroughly covers the subject of lubrication. If you have not read your manual since you purchased your projector, devote a few minutes to it tonight —you will probably

Read what your projector's manual has to say on the subject of lubrication. These finely fabricated machines should not be expected to perform faultlessly unless properly cared for.

He: "Are my ears red. Gosh—we haven't oiled our projector in a month of Sundays."



find many items in it which have escaped your memory.

And then there are the optical aspects of home movie projection.

Projection lamps last many, many hours. Yet, in time, they will quite naturally become somewhat blackened by extensive use. And when they do a loss of screen brilliance is inevitable. Inspect the lamp in your projector at regular intervals and replace it with a new one when necessary. Incidentally, don't wait to obtain a spare lamp until the old one becomes thoroughly blackened or blows out, as there are few more embarrassing situations than that of the home movie projectionist whose film recital is confined to a single blinding flash on the screen as his overworked projection lamp gives up the ghost. And by the way, be certain that the rheostat control lever of your projector, if it is so equipped, is always set for minimum illumination when the projector is first started. Give the lamp a chance to warm up before taxing it with a full load of juice.

Too much light is as bad as too little

This, by the way, brings us to a fallacy which has arisen in connection with home movie showings in regard to lamp brilliancy. Some movie makers have come to believe that the more brilliant the projection lamp, the better the screen results will be. This is not at all the case. An over-abundance of illumination can be just as detrimental to the showing of movies as overexposure is to the taking of movies. Too much light in either case is just as bad medicine as too little light. Some projectors, notably the 16 mm. Kodascopes G and EE, and Kodascopes Eight, Models 70 and 70A, have been designed with this obvious fact in mind. It is perfectly apparent that those who show their movies on small screens in small rooms

not only do not require, *but should not use*, a lamp of the same brilliance as that desirable for those who project their movies on large screens in halls and auditoriums.

As "Eight" devotees will be interested in this problem, too, let's take care of them, first.

Owners of 8 mm. projectors notable more for extreme inexpensiveness than for illumination definitely should acquire a more brilliant 8 mm. projector as soon as convenient. The 300-watt lamp of Kodascope Eight, Model 50, supplies ample illumination to a 22 by 30-inch screen of aluminum surface, only, and, because no screen size smaller than this is truly satisfactory, this surface screen is recommended for the Model 50. The three lamps for the Models 70 and 70A make possible greater projection elasticity.

PROJECTED PICTURE SIZES AT VARIOUS DISTANCES WITH KODASCOPES EIGHT, MODELS 70 AND 70A

Based on illumination of 12 to 20 foot-candles for a matte white screen, 6 to 10 foot-candles for a beaded screen, and 3 to 5 foot-candles for an aluminum screen.

Lens-to-Screen Distance	*Picture Size*		*Lamp, for Use with*		
	Height	*Width*	*Matte White Screen*	*Beaded Screen*	*Aluminum Screen*
10 feet	15″	20″	400- or 500-watt	Too bright	Too bright
15 feet	22″	30″	Too dark	400- or 500-watt	300-watt
20 feet	30″	40″	Too dark	Too dark	400- or 500-watt
25 feet	39″	52″	Too dark	Too dark	500-watt

With 16 mm. movies, the leaning has been toward a bit too much light rather than too little. In average-sized rooms a screen four to five feet in width is certainly large enough—and screens of this size can be ideally illuminated with a 400- or 500-watt lamp. Lamps of 750-watts, and even greater wattage, do more harm than good nine times out of ten. In halls or auditoriums they are fine. But in the average home, on an average-sized screen, they tend to "burn out" screen images—particularly Kodachrome.

On the opposite page is a chart for 16 mm. movie makers. It refers to Kodascopes G and EE only, for even with lamps of the same rated wattage, the ratio of wattage to screen lumens (true gauge of illumination) varies widely among projectors—sometimes as high as six to one. It's the light that reaches the screen that counts—not the amount in the lamphouse. The "G" and "EE" make the most of their lighting equipment.

LENS-LAMP CHART FOR ASSURING "TAILOR-MADE PROJECTION" WITH THE 16 MM. KODASCOPES "G" AND "EE"

Based on illumination of 12 to 20 foot-candles for a matte white screen, 6 to 10 foot-candles for a beaded screen, and 3 to 5 foot-candles for an aluminum screen.

Lens-to-Screen Distance	*For This Size Picture*	*Use This Projection Lens*	*Matte White Screen*	*Beaded Screen*	*Aluminum Screen*
10 feet	34″ x 45″	1″ f/2.5	Too dark	750-watt	400-watt
10 feet	22″ x 30″	1½″ f/2.5	500-watt	400-watt	Too bright
10 feet	16½″ x 22″	2″ f/2.5	400-watt	Too bright	Too bright
15 feet	34″ x 45″	1½″ f/2.5	Too dark	750-watt	500-watt
15 feet	26″ x 34″	2″ f/2.5	750-watt	400-watt	Too bright
15 feet	26″ x 34″	2″ f/1.6	500-watt	Too bright	Too bright
20 feet	45″ x 60″	1½″ f/2.5	Too dark	Too dark	750-watt
20 feet	34″ x 45″	2″ f/2.5	Too dark	750-watt	400-watt
20 feet	34″ x 45″	2″ f/1.6	750-watt	400-watt	Too bright
20 feet	22″ x 30″	3″ f/2	500-watt	Too bright	Too bright
25 feet	42″ x 56″	2″ f/2.5	Too dark	Too dark	500-watt
25 feet	42″ x 56″	2″ f/1.6	Too dark	750-watt	400-watt
25 feet	29″ x 38″	3″ f/2	750-watt	400-watt	Too bright
30 feet	51″ x 68″	2″ f/1.6	Too dark	750-watt	500-watt
30 feet	34″ x 45″	3″ f/2	750-watt	500-watt	Too bright
30 feet	26″ x 34″	4″ f/2.5	750-watt	400-watt	Too bright
35 feet	60″ x 80″	2″ f/1.6	Too dark	Too dark	750-watt
35 feet	40″ x 53″	3″ f/2	Too dark	750-watt	400-watt
35 feet	30″ x 40″	4″ f/2.5	Too dark	500-watt	Too bright
40 feet	68″ x 90″	2″ f/1.6	Too dark	Too dark	750-watt
40 feet	45″ x 60″	3″ f/2	Too dark	750-watt	500-watt
40 feet	34″ x 45″	4″ f/2.5	Too dark	750-watt	400-watt
45 feet	51″ x 68″	3″ f/2	Too dark	Too dark	500-watt
45 feet	38″ x 51″	4″ f/2.5	Too dark	750-watt	400-watt
50 feet	42″ x 56″	4″ f/2.5	Too dark	Too dark	500-watt
60 feet	51″ x 68″	4″ f/2.5	Too dark	Too dark	750-watt

As indicated by the chart, there are 6 projection lenses available for the "G" and "EE," and three lamps for each—400-, 500-, and 750-watt. By checking most convenient projection "throw" against desired screened picture size it is easy to see what lens-lamp combination is ideally suited for the projection of pictures on the screen you use.

Smooth, aluminum screens have the best surfaces from the standpoint of reflected brilliancy at a narrow angle—or, in other words, almost directly back toward the projector. Beaded screens, and those with coarse



Slip off your projector's gate every now and then to make certain that its track, along which your precious films repeatedly slide, is free from abrasive particles.

aluminum finish, while they do not reflect quite as much light directly back toward the projector, do reflect a clearer image when viewed at a greater angle—surely an advantage in small rooms.

If you already have a screen that shows pictures somewhat smaller than the minimum size recommended in the table, your screen images, although receiving more than adequate illumination, will be quite satisfactory. Inversely, projectors which will supply adequate light for one size screen will not fall far short of perfection on screens half again as large.

With projection lamp clean and properly seated, you should next turn your attention to the reflectors inside the lamphouse and to both front and rear surfaces of the projection lens. A minute's work with a clean cloth will rid these of any oil spatterings or fingerprint smudges that might affect the quality of the screen images. And don't overlook the film track. Follow it with your cloth from the upper sprocket, through the gate, to the lower sprocket. Remove all possible oil spatterings and bits of lodged emulsion—this adds years to the life of your film.

ON WITH THE SHOW

Once more we find that the showing of movies parallels the exposure of movies. Your technic can be quite simple or most elaborate. There are, in fact, many movie makers who are satisfied with nothing less than a professional presentation of their films. Recreation rooms, unused space in the attic—avid cinamateurs have recreated miniature theaters with regularly spaced chairs, a curtained screen softly lighted with vari-colored lamps before the show is inaugurated and between reels, the projector concealed in a sound-proof projection booth, and appropriate music supplied by recordings amplified by a loud speaker located behind the screen. The whole atmosphere is that of an exclusive professional preview.

More power to those who have the patience to go to such extremes.

But truthfully, amateur movies need not at all be cloaked with a professional air to retain the interest of onlookers. In general, the belief is held that the best musical accompaniment is the applause of your screen onlookers. However, forethought for the comfort of your audiences is obviously both good sense and good taste. If you know the number of your audience in advance, plan your seating arrangements so that each guest will have an unobstructed view of the screen and from as nearly head-on as possible. For screen images are reflected light—and quite naturally therefore appear more brilliant when seen from an angle closely paralleling that at which the projector beams are thrown upon the screen. This is not at all a suggestion that you clutter up your living room with a military formation of uncomfortable straight-backed chairs. Home movies should generally be a strictly informal affair. The screen need not even be established on a stand or table. Nor need the projector be placed upon a spindly-legged card table. It should not, in fact, be established upon a fragile table, but always upon a substantial base, be it table or floor—and many movie makers have discovered the virtues of "floor" shows. When all the guests have arrived, ashtrays conveniently distributed (the proverbial bull in the china shop is a far gentler soul than the ordinary male fumbling about in a strange and darkened living room in search of an ashtray during the progress of a home movie show), it is

Most movie makers stage impromptu shows and prefer informal home movie presentations such as this.





No small achievement is represented by one of the advantages incorporated in Kodascopes G and EE, which permits these projectors to be seated upon the top of their own carrying cases and their brilliant projection beams directed toward the screen — whether it be established on floor, table, or mantel.

but a moment's task to pluck the projector out of a concealed corner, set it on the floor, frame it on a screen similarly established, and begin the projection of scenes already threaded and focused for the occasion. You are quite likely to find that your guests will prefer to slouch down in a comfortable davenport in back of, or just to one side of the projector. And one or two will probably whoop with joy, grab pillows, and sprawl upon the floor.

Certainly this easy, informal technic is far preferable to that of enlisting the aid of guests in a frantic last-minute search for projector, screen, and film—and then herding them about the room as you rearrange tables, chairs, projector, et al. For, although this latter plan has the advantage of bringing your guests together in common cause, it has been known to weld them into muttering groups from which they could be lured only by the advent of midnight refreshments.

PLANNING THE MOVIE MENU

But—just what movies are you going to show?

If your screen audience is composed solely of members of your family, this problem need give you no concern. Every foot of your films will be of interest. But, as was stated in our chapter on film editing, the wise movie maker will never inflict an abundance of family cinematic escapades upon friends. Plan your program in advance. You've likely a few fat reels and a few lean reels of general interest. In the former group may be found the film story of your Canadian fishing jaunt or your Mediterranean cruise. In the latter group, brief subjects such as a one-reeler of a neighborhood fire which you filmed from first alarm to the departure of pumpers and hook-and-ladders, a hundred feet or so devoted to Niagara, amusing antics of zoo inmates, expert performances at Lake Placid. Estimating the projection time of each 400-foot reel of 16 mm. film and

200-foot reel of 8 mm. film as being a quarter of an hour, you can quickly arrange your films so that your guests are treated to a pleasing variety of lengths and subjects.

And in this connection, your attention should most certainly be called to the valuable source of film material represented by film libraries with the help of which many alert cinamateurs round out their movie shows.

PROFESSIONAL FILM SOURCES

Foremost among the sources supplying professionally-made reels, reduced to 16 mm. and 8 mm. dimensions, are the film libraries found in the principal cities of the United States and Canada—the addresses of which may be obtained by consulting your local home-movie equipment dealers.

Cinegraphs are another source of worthwhile professionally-made film subjects. Your dealer may be a Cinegraph outlet. These 100 to 2000-ft. film subjects may be purchased outright, or through some dealers, may even be rented. They include comedies, animated cartoons, natural history, adventure, sport, and those entrancing juvenile series featuring Snap the Gingerbread Man, Chip the Wooden Man, and the unpredictable Doodlebugs. Ask your dealer for a copy of the 8 mm. and 16 mm. Cinegraph Catalog, "Stars of Hollywood on your own home movie screen."

Nor are these the only source of professionally-made releases. There are literally hundreds upon hundreds of 8 mm. and 16 mm. reels prepared by industrial organizations, steamship lines, and the like, which make genuinely absorbing screen material. Many of these can be obtained for an evening's showing without cost. For others, sponsors ask a modest rental fee. The United States Government, through its various bureaus, likewise offers a number of free and interesting film releases.



Still better is the Projecto Case for Kodascopes G and EE. Basically, it's a standard carrying case fitted with extra compartment on its back. This compartment, when opened, discloses three tripod legs which raise the case to convenient projection height. The compartment cover becomes a shelf . . . the front of the carrying case a sturdy projection stand. Owners of standard cases for the "G" and "EE" may have them fitted with the tripod compartment.

FILM LISTINGS

Perhaps the most complete listing under one cover of such releases is that contained in the moderately priced "1,000 and One," a booklet published by Educational Screen, 64 East Lake Street, Chicago. Educational Screen is the official publication of the Department of Visual Instruction of the National Educational Association. Another compact grouping of available films is the booklet, "Selected Motion Pictures," by the Y.M.C.A. Motion Picture Bureau, 347 Madison Avenue, New York City. The Department of the Interior likewise publishes a free bulletin entitled, "Sources of Educational Film and Equipment," available from Editorial Division, U.S. Office of Education, Washington, D.C.

* * *

But . . . time's about up. To be consistent with the informal style of this book, let's close on a light note and consider a novel projection stunt.

ARTIFICIAL "SOUND" MOVIES

The screen subject should preferably be a comedy skit such as *The Doorbell Symphony* outlined in the "Play-Making" chapter of this book, and it should be projected on a tightly stretched sheet instead of a screen. Behind this sheet, group a few confidants armed with scripts so that they can speak for your screen characters—for this invisible cast can easily see the action taking place on the transparent sheet. Likewise behind the sheet there should be sound-effect "experts" who, for example, will briskly rub pads of sandpaper together when the silver polish demonstrator of *The Doorbell Symphony* skit is screened in the act of polishing silver, will ring a telephone bell at the proper moments, strike a sour note on the piano when the screened piano tuner touches the keyboard—and similarly pinch-hit for all of the other easily simulated sound cues. You won't need one unseen voice for each screen character—two or three orally agile individuals could give voice to a dozen on the screen. If the pace of the action occasionally results in a bass-voiced giggle from the screen ingénue, so much the better for its comedy aspect.

Nor is there any reason why you must wait until you've made a little playlet before adopting the idea. A family reel will do.

* * *

And so, How to Make Good Movies is brought to an end.

It is hoped that you have found it of interest and help in your pursuit of more enjoyable—but not more complicated —movie making.

Some readers, undoubtedly, will rate this book as lacking on a few points of specific interest. Others may deem its contents somewhat elementary. Still others, to whom its chapters have proved absorbing reading, may wish still more complete information on certain phases of amateur cinematography. To all these the Service Department of the Eastman Kodak Company gladly extends an offer of friendly assistance.

Although the contents of this little book are as currently correct as is possible, there will inevitably be new developments, new ideas, and new equipment of considerable interest to alert cinamateurs. Such information is yours, without cost, in *Ciné-Kodak News*, published several times a year by the Eastman Kodak Company. You should be on its mailing list.

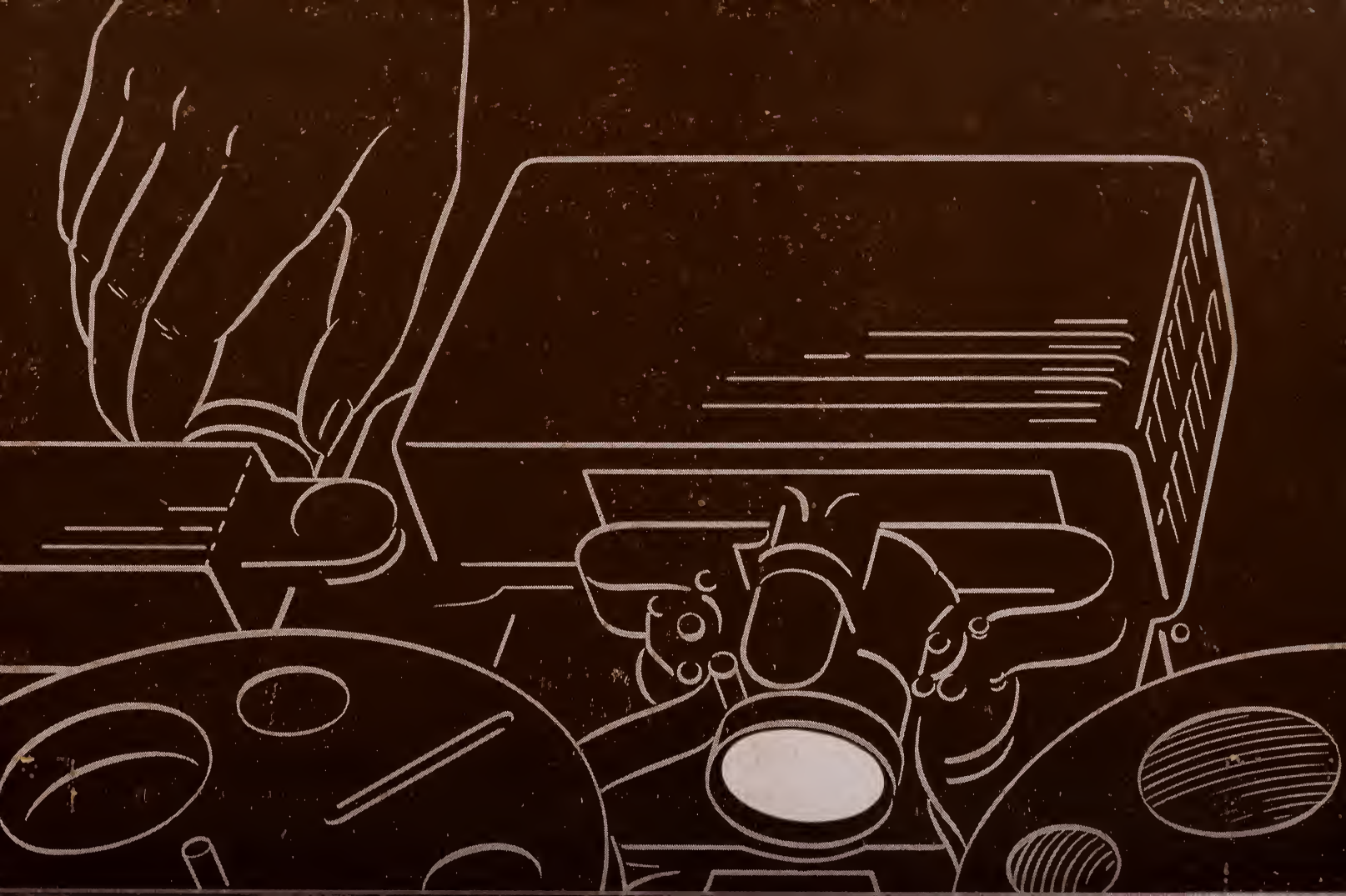
Good luck—and good movies.

He: "Well?"

She: "Wait 'til you see my pictures from now on if you really want to learn how to make good movies."



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